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New taxa and new records of butterflies from Vietnam, 2*

(Lepidoptera, Rhopalocera)

by

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Summary: 8 new species and 9 new subspecies from different families of Rhopalocera are described and illustrated, on the base of the material collected in 1998–2002, mostly in the mountain plateaus of Central Vietnam: *Chilasa imitata* spec. nov., *Papilio prexaspes intricatus* subspec. nov., *Meandrusa sciron dalata* subspec. nov. (Papilionidae), *Elymnias hypermnestra robinsona* subspec. nov., *Ethope diademoides metayei* subspec. nov., *Lethe philesanoides* spec. nov. (Satyridae); *Aemona kontumei* spec. nov., *Aemona simulatrix* spec. nov., *Aemona implicata* spec. nov., *Zeuxidia sapphirus* spec. nov., *Discophora aestheta* spec. nov. (Amathusiidae); *Neptis armandia morrissi* subspec. nov., *Neptis genulfa miennamica* subspec. nov., *Neptis philyroides mienbaca* subspec. nov., *Euthalia confucius gibbsi* subspec. nov. (Nymphalidae); *Dodona katerina sombra* subspec. nov. (Riodinidae); *Eusaspa minae* spec. nov., (Lycaenidae). Further 20 species are new records for Vietnam. The female of *Delias vietnemensis* MONASTYRSKII & DEVYATKIN, 2000 (Pieridae) is described for the first time; an additional description is given for *Dodona speciosa* MONASTYRSKII & DEVYATKIN, 2000 (Riodinidae).

The data presented are the result of recent butterfly fauna surveys, which were conducted within the frames of zoological expeditions organized by some conservation projects and various non-government organizations based in Vietnam. The majority of new records and new taxa was discovered in the central provinces of Vietnam situated in the Dalat plateau (Lam Dong) and in the Annamite montane area (Ha Tinh, Quang Tri and Thua Tien Hue provinces). Some new taxa and records were found during the work in The Natural History Museum (London) and in the Museum National d'Histoire Naturelle (Paris).

New collecting localities

(for others see DEVYATKIN & MONASTYRSKII, 1999, 2002; MONASTYRSKII & DEVYATKIN, 2000)

Central Vietnam (Annam)

Bi Doup – Nui Ba Nature Reserve, Lac Duong district, Lam Dong Province (12°00'–12°19' N, 108°21'–108°44' E)

Located on the Dalat plateau, the whole site lies above 1,400 m (the highest point, Mt. Bi Doup, reaching 2,287 m). The area represents two main forest types: coniferous forest, dominated by *Pinus kesiya* with smaller amounts of *P. merkusii*, and evergreen forest, further clas-

* Due to a printer's error in part 1 (Atalanta (2000) 31 (3/4): 471–472) among the material listed occasionally the term "IF" appears, this should be read as "1 ♀".

sified into lower montane, dominated by species of the Fagaceae and Lauraceae families (*Castanopsis indica*, *Lithocarpus* spp., *Quercus* spp., *Cinnamomum* spp. and *Litsea* spp.), and upper montane, characterized by the presence of the genera *Syzygium* and *Rhododendron*. The flora and fauna of the nature reserve exhibit high levels of endemism.

Collectors: ALM, BXP (IV.2002).

Cat Tien Nature Reserve, Dong Nai, Lam Dong and Binh Phuoc Provinces (11°21'–11°48' N, 107°10'–107°34' E)

The topography of the area varies greatly among the three sectors of the national park from the low, gentle hills of the lowlands of southern Vietnam (the Nam Cat Tien and Tay Cat Tien sectors) to the steep hills of the western extent of the Central Highlands (the Cat Loc sector), the highest elevation reaching 650 m.

The national park supports a great variety of habitat types, including primary and secondary lowland evergreen forest, primary and secondary lowland semi-deciduous forest, freshwater wetlands and open lakes and seasonally inundated grasslands, flooded forest and a range of secondary habitat types, including grassland and areas dominated by bamboo (BIRDLIFE INTERNATIONAL AND THE FOREST INVENTORY AND PLANNING INSTITUTE, 2001).

Collectors: ALM, Bui Huu Manh, Nguyen Tran Binh, Phan Quoc Tuan (IV.–X.2000).

Con Dao National Park, Ba Ria – Vung Tau Province (8°37'–8°48' N, 106°32'–106°45')

The National Park is centred on the archipelago of 14 islands, the largest of which is Con Son, located about 80 km off the coast of southern Vietnam. The topography of Con Son is dominated by a granite ridge (running from south-west to north-east) which shelters the bays on both sides from strong winds. The highest point, Mt. Thanh Gia, reaches 577 m. Con Son and many islands of the archipelago are extensively forested. An outstanding feature of Con Dao's flora is the 44 plant species being discovered for the first time on the islands and mostly named after the site, including *Dipterocarpus condorensis*, *Ilex condorensis*, *Pavetta condorensis* and *Psychotria condorensis*. The terrestrial forest supports also a number of bird and mammal species of conservation importance.

Collectors: A. BEDFORD RUSSELL (IV.1966–I.1968) (collection deposited in The Natural History Museum, London).

Principal collectors

ALM – A. L. MONASTYRSKII;

BXP – BUI XUAN PHUONG;

FR – Frontier-Vietnam organization volunteers;

FFI – Fauna and Flora International organization volunteers.

Abbreviations

BMNH – The Natural History Museum (London)

MNHN – Museum National d'Histoire Naturelle (Paris)

MSU – Department of Entomology, Moscow State University

TL – Type locality.

New taxa and new records

Papilionidae

Chilasa imitata spec. nov.

(colour plate V, figs. 1, 2)

Holotype ♂: C. Vietnam, Lam Dong Province, Dong Mang district, Bi Doup – Nui Ba Nature Reserve, 2,200 m, 16.IV.2002 (ALM leg.).

Paratypes (4 ♂♂, 2 ♀♀): 4 ♂♂, the same locality and date as the holotype; 1 ♀, the same locality, 5.IV.2002 (ALM & BXP leg.); 1 ♀, Central Vietnam, Khanh Hoa Province, Dien Khanh district, forest stream at 1,200 m, 6.IV.2003 (ALM leg.).

Holotype and ♀ paratype BMNH, ♂♂ paratypes MSU.

Description

Both sexes medium-sized, the female being larger; abdomen and thorax spotted.

Male (col. pl. V, figs. 1, 2)

Upperside. Forewing: ground colour black with grey-greenish markings; a submarginal series of spots in spaces 2–9; spots in spaces 2–5 round, while those in spaces 6–9 elongate; the discal band consists of elongate spots in spaces 1b–7, separated by black-scaled veins; spots in spaces 1b–5 more distinct, while those in spaces 6–7 obscure and dusty; the spot in space 2 extends from the base to the submarginal spot and is divided by a black horizontal line reminding a vein; costal area black; three black lines inside the cell, irradiating from the base to veins 3–5; a pale dusty subapical streak in space 8.

Hindwing: ground colour black and brown with grey-greenish markings; a series of small marginal spots present or absent in spaces 2–6; submarginal spots well visible in spaces 1b–6, gradually expanding to space 6; a series of discal spots from space 1b to 7, all of them bordered by black and separated by brown-scaled veins; the tornal and subternal areas brown extending from space 1a to 3; the tornal orange spot is very small and hardly visible; the costal area is brown.

Underside. Forewing: ground colour black and brown with markings the same as on the upper-side; apical and subapical areas dull brown.

Hindwing: ground colour brown; the pattern of spots and lines similar to the upperside.

Forewing length 39–40 mm.

Female

Upperside and underside very similar to those of the male, but of larger size.

Forewing length 47 mm.

Male genitalia

Harpe rounded, with convex margin covered by a number of serrate rows of chitinous protuberances.

In general, the male genitalia are similar to those of *Chilasa epycides*.

Discussion and diagnosis

On one hand, the wing pattern of the new taxon is in many respects similar to that of *Chilasa*

agestor govindra LEECH; however, all taxa belonging to the *agestor* complex have a striped pattern on the abdomen. On the other hand, the pattern is also similar to *Chilasa epycides*; however, despite a number of forms all of them are deprived of greenish markings and brown tornus on the hindwing. The new species is also deprived of a tornal orange spot on the hindwing.

Papilio prexaspes intricatus subsp. nov.

(colour plate V, figs. 3, 4)

Holotype ♂: N. Vietnam, Lang Son Province, Huu Lien Nature Reserve, 200 m, 17.IV.2000 (FR leg.).

Holotype BMNH.

Description

Upside: ground colour of both wings black; forewing without any spots or lines in the tornal area; postdiscal, submarginal and marginal areas are slightly paler than basal and subbasal areas; androconial brands absent; hindwing tailed and slightly elongated from the base to the tornal side; it is uniformly black, with a white band consisting of spots in spaces 4, 5, 6 and 7, separated by black veins; no spots in spaces 1b–3; the inner margin of the white band is slightly convex toward the cell and touches it in spaces 4 and 5; the inner and outer borders of spots are slightly dusted (not sharp).

Underside: ground colour of both wings black; a subtornal spot in space 1b on the forewing; the postdiscal white band on the hindwing spreads from the tornal space 1b to the costal space 7, expanding in spaces 4–6 and slightly touching the cell in spaces 4 and 5; the outer edge of the white band is bordered by blue spots; there is a series of orange submarginal lunules.

Length of forewing 52 mm.

Diagnosis

The new taxon is similar to the nominate *Papilio prexaspes* C. & R. FELDER, 1865, distributed in the Malay Peninsula, and differs from it in having the following characteristics: white spots on the hindwing smaller and the white band looks narrower; white spots separated by blackened veins; the space between the outer border of the band and the marginal edge is wider; the subtornal spot on the underside of the hindwing is smaller; the border of the spots in the white band is not sharp.

Meandrusa sciron dalata subsp. nov.

(colour plate V, fig. 6)

Holotype ♂: C. Vietnam, Lam Dong Province, Dong Mang district, Bi Doup-Nui Ba Nature Reserve, 2,200 m, 16.IV.2002 (ALM leg.).

Paratypes: 3 ♂♂, 1 ♀, same locality as the holotype, 1,900–2,200 m, 16.–22.IV.2002 (ALM and BXP leg.); 1 ♀, C. Vietnam, Lam Dong Province, Blao, 16.I.1960 (R. METAYE leg.).

Holotype and paratype BMNH, paratypes MNHN, MSU.

Description

Male (col. pl. V, fig. 6).

Upperside. Forewing ground colour more or less uniform, dark brown; a white discal patch in space 1b; submarginal lunules obscure and can be seen only in the apical area. Hindwing ground colour dark brown, with blackened postdiscal area; a broad white patch extends from space 5 to the cell and costal space 8; a series of whitish submarginal lunules in spaces 2–7; a yellowish tornal area in space 1b extending to space 2 and the inner border of the tail in space 3; a small whitish dusty patch in space 1a.

Underside. Ground colour of both wings brown with dark reddish brown markings in the basal area; on the forewing, there is a triangular dark reddish brown patch at the end of the cell; on the hindwing, there is a large rounded subtornal patch surrounded by a whitish blue border, and lunules in spaces 1b–4; a rounded spot at the end of the cell. Generally, the pattern is variable and similar to that of other known taxa of *sciron*.

Length of forewing 46–47 mm.

Female.

Upperside. Forewing ground colour similar to that of the male but slightly darker; there is a broad white patch in spaces 1b and 2, not extending to space 3; a series of yellowish submarginal spots in spaces 2–8 and a series of postdiscal yellowish spots in spaces 4, 5 and 7. Hindwing ground colour similar to that of the male as well, but darker and the postdiscal blackened area more prominent; tornal ochreous area wider. A broad white patch extends from the cell and space 5 to space 8 and the costal edge.

Underside similar to that of the male.

Length of forewing 52 mm.

Diagnosis

The new subspecies differs from other known subspecies in the following main characters:

1. The males have a large white discal patch on the upperside of the hindwing extending from space 8 to the cell and space 5; there is a dusty whitish patch in space 1b on the upperside of the forewing.
2. The females have a white discal patch on the forewing in space 1b and 2, which does not extend above vein 2.

Discussion

At present, there are six taxa recognized within the species *Meandrusa sciron*:

M. sciron sciron (LEECH, 1890) (China, Kou Ho)

M. sciron aribbas (FRUHSTORFER, 1909) (TL: Upper Burma)

M. sciron lachinus (FRUHSTORFER, 1902) (TL: Sikkim)

M. sciron nagamasai OKANO, 1986 (TL: S. Thailand)

M. sciron abaensis SUGIYAMA, 1994 (TL: China, Sichuan)

M. sciron sukkiti NAKANO, 1995 (TL: N.E. Thailand)

The species status of some of them is polysemantic. According to some authors, the species *sciron* should be divided into *sciron* LEECH (= *hercules* BLANCHARD, 1871) and *lachinus* FRUHSTORFER (= *gyas* WESTWOOD, 1841) (C. L. HÄUSER et al., unpubl. data: see <http://www.insects-online.de/frames/papilio.htm>).

The nominate subspecies and the subspecies *sciron abaensis* SUGIYAMA, 1994 have rather distinctive wing pattern. Both sexes have well developed yellow discal band on the upperside of both wings. The yellow colour of these elements of the pattern is absent in the males found in the vast area from Nepal to Indochina and to the northern part of the Malay Peninsula. The males of the taxa distributed in Nepal, Sikkim and Assam (ssp. *lachinus*), Upper Burma and N. Thailand (ssp. *arribas*), S. Thailand (ssp. *nagamasai*), N.E. Thailand, Laos and northern part of Central Vietnam (ssp. *sukkiti* NAKANO, 1995) are completely deprived of yellow or white discal patches and bands on the upperside of the hindwing. Only in the southern regions of Central Vietnam the males have white patches on the hindwing extending from space 8 to the cell and space 5 (ssp. *dalata*).

The pattern in the females distributed from Nepal to Indochina is very variable; however, compared to the taxa from China they are deprived of yellow discal patches or bands on both wings as well. The development of the discal elements in the pattern of both wings is also characterized by high variability. In the area from Nepal to N. Indochina the females have a well-developed white discal band on the forewing extending from space 1b to space 4 and a broad white discal band on the hindwing. In the females from N.E. Thailand, Laos and northern regions of Central Vietnam (ssp. *sukkiti*) these white discal elements are much reduced and extend to spaces 1b–3 on the forewing and to spaces 5–8 on the hindwing. In the females distributed in Central Vietnam from Kon Tum to Lam Dong provinces, the white patches do not extend above space 2 on the forewing and below the cell on the hindwing.

Graphium (Pazala) timur (NEY, 1911)

C. Vietnam, Ha Tinh province, Huong Son Complex forest, III.2000, 1 ♂ (FR leg.).

First record from Vietnam.

This species has been recently found in Laos (OSADA et al., 1999) and described as a new subspecies, *koochii* MORITA, 1996. Definitely, the same taxon was discovered in Central Vietnam.

Pieridae

Delias vietnamensis MONASTYRSKII & DEYATKIN, 2000

This species was based on a series of 6 ♂♂ collected in Kon Ka Kinh Nature Reserve, Gia Lai Province. The 2002 expedition to Bi Doup – Nui Ba Nature Reserve (Lam Dong Province) brought another series of this species, including a number of previously unknown females, the description of which is given below.

Material: 8 ♀♀, C. Vietnam, Lam Dong Province, Dong Mang district, Long Lanh, (Bi Doup area), 1,700 m, 9.–26.IV.2002 (ALM & BXP leg.).

Female (colour plate VI, fig. 4).

Upperside. Forewing ground colour white; the general pattern much as in the male, all the black elements being greatly extended; all veins densely suffused with black; the black spot at the end of cell is broad and extended to the subcosta; the submarginal black pattern reaches

dorsum, with a full set of white spots between veins; the whole wing is suffused with black scales, more densely at the base and near the costa. Hindwing: ground colour predominantly yolk-yellow; veins broadly suffused with black in the costal half of the wing, with white submarginal lunules, greatly extended compared to the forewing; tornal half of the wing yellow, with veins 1a to 3 finely black.

Underside. Practically not different from that of the male, except that the submarginal lunules on the hindwing are more extended and more whitish.

Length of forewing 28–31 mm.

Delias agoranis GROSE-SMITH, 1887

1 ♂, C. Vietnam, Nghe An Province, Pu Mat Nature Reserve, 1000 m, 11.V.1998 (FFI expedition leg.).

First record from Vietnam.

Previously it has been found in the area from Burma to northern Thailand and Laos.

Satyridae

Elymnias hypermnestra robinsona subspec. nov.

(colour plate V, figs. 5, 7, 8)

Holotype ♂: S. Vietnam, Con Dao (Con Son Is.), 15.IX.1967 (A. BEDFORD RUSSELL leg.).

Paratypes: 10 ♂♂, 12 ♀♀, same locality as holotype, VII., IX., XII.1967 (A. BEDFORD RUSSELL leg.).

Type series in BMNH (BEDFORD RUSSELL collection).

Description

Male (col. pl. V, fig. 5)

Upperside: The ground colour is dark blue; the forewing bears a series of bright blue submarginal spots, which are much smaller than in other forms from the mainland populations in southern Vietnam; the hindwing border is dull brown and is much darker and narrower than in the males from the continent; the shade of the border varies insignificantly.

Female (col. pl. V, figs. 7, 8)

Upperside: forewing ground colour bluish black; there is a dark crimson area extending to the base of space 2 and partly to the cell; a series of submarginal bluish spots is well visible only in spaces 3–7. Hindwing: the ground colour is slightly paler, with a more pale tornal area and a distinct submarginal dark border with obscure submarginal spots.

Discussion

In the informal description PINRATANA & ELIOT (1988) showed that the male of the ssp. *meridionalis* FRUHSTORFER, 1902 distributed in southern Vietnam has a weakly contrasting hindwing border. However, the male from Cat Tien has a very contrasting tawny border against the rest of the wing, somewhat recalling subspecies *tinctoria* MOORE. This form differs well from

the Con Son specimens, which have very dull brown border. A rather similar colour of the border is found in the specimens from Trang Bom (S. Vietnam); however, it is broader, slightly paler and bears whitish spots.

Elymnias pantera (FABRICIUS, 1787)

1 ♀, S. Vietnam, Lam Dong Province, Cat Tien National Park (Cat Loc), 4.V.2000 (Bui Huu MANH leg.).

First record from Vietnam.

The female collected shows some differences from other known subspecies; however one female specimen is insufficient for description.

Elymnias penanga (WESTWOOD, [1851])

2 ♂♂, C. Vietnam, Ha Tinh Province, Huong Son Forest Complex, 200 m, 1.III.2001 (FR leg.).

First record from Vietnam.

The species is distributed from Assam to Sumatra and Borneo and was recently found in Laos (OSADA et al., 1999), being represented by the subspecies *chelensis* DE NICEVILLE, 1890.

Elymnias nesaea LINNAEUS, 1764

2 ♂♂, S. Vietnam, Binh Duong, Lai Thieu, 28.IV.1974 (R. METAYE leg.).

First record from Vietnam.

The specimens show similarity to the subspecies *apelles* (FRUHSTORFER, 1902), distributed in Thailand (Bangkok). It was found in the R. METAYE collection deposited in the Paris Museum during the last survey in October 2002.

Lethe philesanoides spec. nov.

(colour plate VI, figs. 1–3)

Holotype ♂: North Vietnam, Hai Phong Province, Cat Ba National Park, limestone forest, 1.VI.2001 (ALM leg.).

Paratypes (2 ♂♂, 1 ♀): 1 ♂, the same label as the holotype; 1 ♂, North Vietnam Lang Son Province, Huu Lien Nature Reserve, 100 m a.s.l., 23.VIII.2000 (FR leg.); 1 ♀, the same locality, limestone forest, 29.VII.2000 (FR leg.).

Holotype MSU, paratypes BMNH, MSU.

Description

Male (col. pl. VI, figs. 1, 2)

Upside. Ground colour of both wings uniform deep velvet chocolate black, paler at forewing apex, with traces of forewing apical and hindwing tornal spots.

Underside. Ground colour dark brown. Forewing: outer part, including space 1a, paler, with a series of 4–5 white-pupilled ocelli in spaces 2 to 6, their development varying, that in space 5 (or 5 and 6 in one specimen) being the largest; each of the ocelli yellowish-ringed, and the whole series silvery-bordered; 3 transversal dark stripes in and at the end of the cell; dark oblique discal line quite produced at vein 2. Hindwing with a series of 6 white-pupilled ocelli, each of them yellowish-ringed, that in space 1c double and those in spaces 2 and 6 the largest; purplish silvery border common for the spots in spaces 1c to 3 and separate for the others. Dark inner margin of the discal band almost straight; outer margin produced along vein 4. Length of forewing 33–34 mm.

Female (col. pl. VI, fig. 3).

Upperside. Ground colour dark chocolate brown, rather paler than in the male; faint traces of subapical ocelli on the forewing and subternal ocelli on the hindwing. Forewing with a white oblique discal band, showing a slight purplish gloss, from the outer half of costa almost to tornus, rather irregular and outwardly diffusely shaped; traces of a doubled white marginal line near tornus. Hindwing unmarked, except the double white marginal line, suffused brownish towards tornus.

Underside. Similar to that of the male except the white band; purplish white double marginal line, extended at apex, from costa to tornus.

Length of forewing 33 mm.

♂-genitalia (fig. 8)

Uncus longer than tegumen, moderately bent downwards, gradually expanded towards the middle and tapered to the bluntly ending tip (lateral view). Subunci slender, curved, pointed, dorsally uneven and longer than $\frac{1}{2}$ length of uncus. Distal part of clasp narrow, parallel-sided, looking slightly expanded in dorsal view, its end tapered but rather blunt in lateral view, with a finely serrate dorsal rib. Aedeagus as long as clasp, slightly more sclerotized in the distal part. Sacculus long and robust.

♀-genitalia

The genitalia of the single female look very similar to those of *L. philesana* MONASTYRSKII & DEVYATKIN, 2000.

Diagnosis and discussion

The above formal description almost totally corresponds to that of *L. philesana* MONASTYRSKII & DEVYATKIN, 2000, to which the new species is most similar. However, even the general appearance of the new species makes it possible to distinguish it from *L. philesana* at once. In details, the differences from the latter one are as follows:

- larger size and more produced wings
- ground colour much darker with more pronounced violet tinge.

Forewing underside:

- median streak in cell bowed towards base (almost straight in 1 specimen) (slightly bowed towards termen in *L. philesana*)
- dark discal line originates further from mid-costa, i. e. the pale apical and terminal area separated by it is narrower
- this line is relatively more produced towards termen along vein 2

- the number of ocelli is generally greater, and the difference in size between them is less
- Hindwing underside:
- discal band is narrower near costa, and its inner border is almost straight (wavy in *L. philesana*)
 - outer border of discal band is strongly produced along vein 4
 - silvery border of ocelli is never common for the whole series
 - silvery border of ocellus in space 6 is always separated by ground colour both from that in space 5 and from the dark outer border of the discal band.

In male genitalia, the new species is also most similar to *L. philesana*, the main differences being as follows:

- uncus more bluntly ending
- subunci wider, dorsally uneven or slightly serrate (shorter and smooth in *L. philesana*)
- distal part of clasp not sharply pointed at the end, with a finely serrate dorsal ridge (smooth and sharply pointed in *L. philesana*)

The illustration of *L. philemon* FRUHSTORFER, [1902] in OSADA et al. (1999) (upperside only), referred to *L. philesana* in our previous publication (MONASTYRSKII & DEVYATKIN, 2000), may be in fact referable to the new species as well, judging from the large size and very dark ground colour.

Lethe violaceopicta (POUJADE, 1884)

1 ♂, 1 ♀, N. Vietnam, Lao Cai Province, Den Thang area, 2,000 m, 07.XI.2000 (Vu VAN LIEN leg.); 1 ♀, Tuyen Quang, Na Hang Nature Reserve (Sinh Long), 20.V.2001 (BXP leg.).
First record from Vietnam.

Lethe bhairava (MOORE, [1858])

1 ♀, N. Vietnam: Tam Dao N.P., V.2000 (indigenous collector leg.).
First record from Vietnam.
This species has been previously found in the adjacent countries.

Ethope diademoides metayei **subspec. nov.**
(colour plate VI, fig. 8)

Holotype ♂: C. Vietnam, Lam Dong Province, Col de Blao, Route QL 20 km, (700 m), 23.II.1975 (R. METAYE leg.).

Paratypes: 1 ♂, same locality and date as the holotype; 1 ♂, Lam Dong Province, Bao Lam (Cat Tien National Park), 600 m, 19.V.2000 (ALM leg.).

Holotype MNHN, paratypes BMNH, MSU.

Description

Male (col. pl. VI, fig. 8)

The size is similar to the average size of the nominate subspecies, however larger than subspecies *hislopi* CORBET, 1948. Ground colour of both wings is brown; underside paler.

Upperside. In general, the pattern of the forewing is similar to that of the nominate subspecies; there is a series of small submarginal whitish spots. Hindwing with a prominent band of large submarginal spots, which are more elongated than in the nominate subspecies and rather pointed in spaces 3 and 4. Inner and outer edges of the submarginal spots are considerably remote from the edge of the hindwing; inner side of spots more approaching to the veins of the cell. The space between the outer side of the submarginal spots and the inner side of the marginal spot is much broader than in the subspecies *diademoides* MOORE, 1879 and *hislopi*. The submarginal spot in space 6 has the same size as the spot in space 5 or slightly smaller. In other subspecies the spot in space 6 is much smaller. In all specimens of the new subspecies examined there is a tornal spot in space 1a, more or less equal in size to the spot in space 6. Underside. The pattern is similar to the upperside. Length of forewing 38–39 mm.

Male genitalia

The genital armature is similar to that of the nominate subspecies from Tenasserim and Upper Burma; length of clasps is the same. At the same time, in the nominate subspecies both sides of the uncus gradually converge towards the end (in lateral view), while in the new subspecies the upper and lower sides are parallel; the apex of the clasp is much more hooked in the new subspecies.

Discussion

VANE-WRIGHT & HUGGINS (1972) have mentioned that conspicuous variation is largely restricted to the size and shape of the hindwing submarginal spots, which may be more or less extensive. At the same time, they have not noted on any large spots in spaces 1a and 6. While examining the nominate subspecies and ssp. *hislopi* we have not seen the spots mentioned above as well.

Amathusiidae

Aemona kontumei spec. nov.

(colour plate VI, figs. 5–7)

Holotype ♂: Central Vietnam, Kon Tum Province, Ngoc Linh Nature Reserve, 1700 m, 2.IV.1998 (ALM leg.).

Paratypes (6 ♂♂, 2 ♀♀): the same locality as the holotype, 1 ♀, 1700 m, 30.III.1998; 2 ♂♂, 1600 m, 3. and 6.IV.1998; 1 ♀, 1450 m, 20.IV.1998; 1 ♂, 1600 m, 21.IV.1998; 1 ♂, 1500 m, 6.V.1998 (all ALM leg.); 2 ♂♂, Central Vietnam, Gia Lai Province, Kon Ka Kinh Nature Reserve, 1600 m, 19. and 20.IV.1999 (ALM leg.).

Holotype BMNH, paratypes MSU.

Description

Male (col. pl. VI, figs. 5, 6).

Generally large; forewing apex falcate and termen convex; hindwing conspicuously angled at vein 4 (M3).

Upperside. Ground colour not uniform: forewing brownish yellow at base, paler yellowish ochreous in the distal part; apex and termen narrowly dark brown, very contrasting; a fine dark streak at the end of the cell (upper part); discal line dark and contrasting, tending to be irregular, interrupted by veins and produced towards termen from both sides of at least veins 2 and 3. Hindwing ground colour brownish yellow (as in the basal part of the forewing); submarginal lunules dark outlined from both sides, filled with paler colour, merged and irregular in spaces 4–5 to 7, separate and gradually reduced towards tornus.

Underside. Ground colour rather dark, ochreous brown, paler in the postdiscal area, darker in the marginal zone; discal line narrowly bordered yellowish from the outside. Forewing with 5–6 brown-outlined ocelli, those in spaces 4–6 usually reduced to dots; those in space 2 and sometimes 1b filled with yellow (with white, in one specimen) and brown-centred. Hindwing with 6–7 brown-outlined ocelli, those in spaces 1c and 2 white-pupilled and those in spaces 4–5 usually dot-like.

Length of forewing 35–44 mm.

Female (col. pl. VI, fig. 7).

Upperside. Similar to the male in general characters, but larger; the contrast between the darker and paler areas more expressed.

Underside. Rather greyish compared to that of the male; spotting pattern the same.

Length of forewing 45–49 mm.

♂-genitalia (fig. 1, A–E).

Uncus equal to tegumen or slightly shorter, leaf-like extended, blunt-ended (dorsal view) and sharply bent down (lateral view). Subunci long, straight, pointed and divergent. Clasp robust, its distal part (“foot”) massive, about $\frac{1}{3}$ – $\frac{1}{3.5}$ length of the clasp; end of the clasp ventrally with a variable number of spines (15–50), tending to be irregular. Juxta (lateral view) rhomb-shaped, with all angles acute, the basal process (connected with aedeagus) very long. Aedeagus as long as clasp, slender, evenly curved (lateral view), almost not extended towards the distal end (dorsal view), with a short patch of irregular spines on the left side.

♀-genitalia (fig. 1, F).

The structure of the female genitalia, especially that of the antevaginal area, is very complicated and seems to be rather similar in all the species studied. Of diagnostic importance is the shape and structure of the antevaginal plate proper, situated immediately before the ostium. In the case of *A. kontumei*, this plate is long, over $1\frac{1}{2}$ times longer than wide, with short deep folds at the distal end (also incised at the middle in one specimen); the ventral surface covered with numerous irregular and laterally directed folds and wrinkles throughout.

Diagnosis and discussion

Since we are not prepared at the moment to provide a full revision of the genus *Aemona* HEWITSON, [1868], we follow here the last published opinion of M. NISHIMURA (1999) and compare the newly described taxa with the butterflies flying in North Vietnam (originally described as *A. amathusia tonkinensis* ROTHCHILD, 1916), which are treated by the last author as belonging to the nominate subspecies of *A. amathusia* (HEWITSON, 1868). The new species differs from the North Vietnamese *A. amathusia* in larger size, strongly falcate apex and convex termen of forewing, strongly two-coloured wing upperside, interrupted discal line, irregular shape of the submarginal lunules and details of the male genitalia (in *A. amathusia*, the uncus

is much longer than the tegumen, sharply pointed, the end of the clasp expanded with a sharply defined field of densely packed very small spines, juxta asymmetric, with a very short basal process, aedeagus shorter than clasp, slightly curved, broad and gradually extended to the distal end, with a long patch of irregular spines on a strongly sclerotized rib of the left side; in the female genitalia, the antevaginal plate is very short, rounded and shallowly excavate, without folds or wrinkles (fig. 4, A–F).

Aemona simulatrix spec. nov.

(colour plate VII, figs. 1–3)

Holotype ♂: Central Vietnam, Gia Lai Province, Kon Ka Kinh Nature Reserve, 1400 m, 24.IV.1999 (ALM leg.).

Paratypes (4 ♂♂, 1 ♀): 1 ♂, the same locality as the holotype, 1200 m, 23.IV.1999; 2 ♂♂, the same locality, 1200 and 1300 m, 24.IV.1999 (ALM leg.); 1 ♀, Gia Lai Province, Kon Cha Rang Nature Reserve, 1000 m, 11.III.1999; 1 ♂, the same locality, 900 m, 12.III.1999 (ALM leg.).

Holotype BMNH, paratypes BMNH, MSU.

Description

Male (col. pl. VII, figs. 1, 2).

Medium-sized; forewing apex not falcate and termen nearly straight.

Upperside. Ground colour of both wings uniformly ochreous; forewing apex and termen only slightly darker than the rest of the wing. Forewing: discal line dark and contrasting, tending to be irregular, interrupted and produced towards termen from both sides of at least veins 2 and 3. Hindwing submarginal lunules dark outlined from both sides, filled with ground colour or slightly paler, separate and subequal.

Underside. Ground colour more or less uniform, yellowish ochreous, including the marginal zone; discal line not bordered yellow; marginal lunules faint but conspicuous. Forewing with 2–3 brown-outlined ocelli, those in spaces 1b and 3 very faint or absent, that in space 2 with a black-ringed white pupil. Hindwing with a full set of 6 ocelli, those in spaces 1c and 2 white-pupilled and black-ringed as on the forewing, those in spaces 3 to 7 filled with ground colour. Length of forewing 33–35 mm.

Female (col. pl. VII, fig. 3)

Upperside. Very different from the male, the ground colour being uniformly greyish brown. Forewing discal line unbroken, very conspicuous, diffusely dark-shaded from the inner side; diffuse pale postdiscal patches in spaces 1b to 3. Hindwing discal line fine and unshaded; submarginal lunules conspicuous, paler than the ground colour, diffusely outlined with dark.

Underside. Ground colour of both wings the same as on the upperside, slightly paler near bases and conspicuously paler in the postdiscal area up to the wing margin; faint traces of marginal lunules.

Forewing ocelli faint, that in space 2 larger and white-pupilled. Hindwing ocelli also faint, brown-outlined; that in space 2 filled with white.

Length of forewing 38 mm.

♂-genitalia (fig. 2, A–E)

In general, very similar to those of *A. kontumei*, but differing in the following characters: uncus slightly longer than tegumen, not so sharply bent down, its leaf-like part longer; subunci shorter, almost parallel; clasp slender, its “foot” smaller and shorter (about 1/5 length of clasp); the end of clasp with a more constant number of spines (about 25), arranged rather regularly; aedeagus and juxta similar to those of *A. kontumei*; aedeagus with only few small lateral spines (almost inconspicuous) in a single line.

♀-genitalia (fig. 2, F)

Similar to those of the above species in general characters. Antevaginal plate short, slightly wider than long, excavate at the distal end, with a small number of faint, mostly longitudinal wrinkles.

Discussion

This new species differs sharply from *A. kontumei*, with which it flies sympatrically and synchronically in Kon Ka Kinh, in external features, being at the same time rather similar in male genitalia; from the North Vietnamese *A. amathusia*, to which it is more similar in appearance, it differs in the characters of the genitalia (see the diagnosis of *A. kontumei*).

Aemona implicata spec. nov.

(colour plate VII, figs. 4–6)

Holotype ♂: North Vietnam, Bac Can Province, loc. Lung Vi, 21.IV.2001 (BXP leg.).

Paratypes (13 ♂♂, 3 ♀♀): 9 ♂♂, 2 ♀♀, the same locality as the holotype, 17., 18., 19., 20., 22. IV.2001 (BXP leg.); 1 ♂, Central Vietnam, Ha Tinh Province, Vu Quang Nature Reserve, 1200 m, 7.VIII.1997 (ALM leg.); 1 ♀, the same locality, 1500 m, 3.IV.2000 (BXP leg.); 2 ♂♂, the same locality, 1500 m, 8.IV.2000 (ALM leg.); 1 ♂, the same locality, 1500 m, 6.V.2000 (ALM leg.).

Description

Male (col. pl. VII, figs. 5, 6)

Medium-sized; forewing apex not or slightly falcate; forewing termen slightly convex or nearly straight.

Upperside. Ground colour of both wings uniform yellowish ochreous. Forewing: apex and termen narrowly and diffusely brown, not very contrasting with the rest of the wing; discal line faint but conspicuous, unbroken. Hindwing: discal line as on the forewing; submarginal lunules faintly outlined from the inner side, large and subequal, as in *A. amathusia tonkinensis*, becoming almost inconspicuous towards tornus.

Underside. Ground colour of both wings more or less uniform, yellowish ochreous, slightly paler in the postdiscal area; discal line brown, not bordered yellow; marginal lunules faint but conspicuous. Forewing ocelli basically visible only in spaces 1b and 2, filled with whitish or ground colour. Hindwing with a full set of 6 ocelli, those in spaces 3 and 4 may be dot-like; those in spaces 1c and 2 filled with whitish. However, in 1 male from Vu Quang, collected in August, ocelli in space 2 of the forewing and in spaces 1c and 2 of the hindwing have black-ringed white pupils, this character making it practically indistinguishable from *A. amathusia tonkinensis*.

Length of forewing 36–38.5 mm.

Female (col. pl. VII, fig. 4)

Larger and darker than the male, forewing apex more conspicuously falcate and termen more convex.

Upperside. Ground colour of both wings more brownish than in the male. Forewing rather contrasting, being darker in the basal and discal areas and much paler in the postdiscal zone and above vein 3 to costa; dark brown coloration at the apex and along termen extended compared to the male. Hindwing of the same ground colour, slightly paler in the postdiscal area near costa, where two upper submarginal lunules are bordered by dark colour; other lunules inconspicuous.

Underside. Ground colour of both wings greyish brown, conspicuously paler in the postdiscal area. Forewing with a set of 5 ocelli, those in spaces 1b and 2 filled with whitish, the others dot-like. Hindwing with 6 ocelli, those in spaces 1c, 2 and 6 filled with whitish.

Length of forewing 42 mm.

♂-genitalia (fig. 3, A–E).

Uncus much longer than tegumen, rather sharply bent down, its distal part leaf-like extended in dorsal view (although not so strongly as in *A. kontumei* and *A. simulatrix*), both parts being equal in length, with a sharply pointed and curved down tip. Subunci relatively short, almost straight but slightly curved upwards and pointed at the ends, conspicuously divergent. Distal part of clasp slender, looking somewhat three-edged in dorsal view; its distal part ("foot") short, about $\frac{1}{6}$ length of clasp, rounded at the end, with a sharply angled dorsal projection; a narrow field of densely packed small spines is situated on the very tip of the clasp. Juxta short, dorsally rather rounded (lateral view), with its basal process (connected to the aedeagus) short. Aedeagus shorter than clasp, faintly curved, evenly extended (dorsal view) towards the distal end, with a narrow patch of irregular small spines on the left side.

♀-genitalia (fig. 3, F)

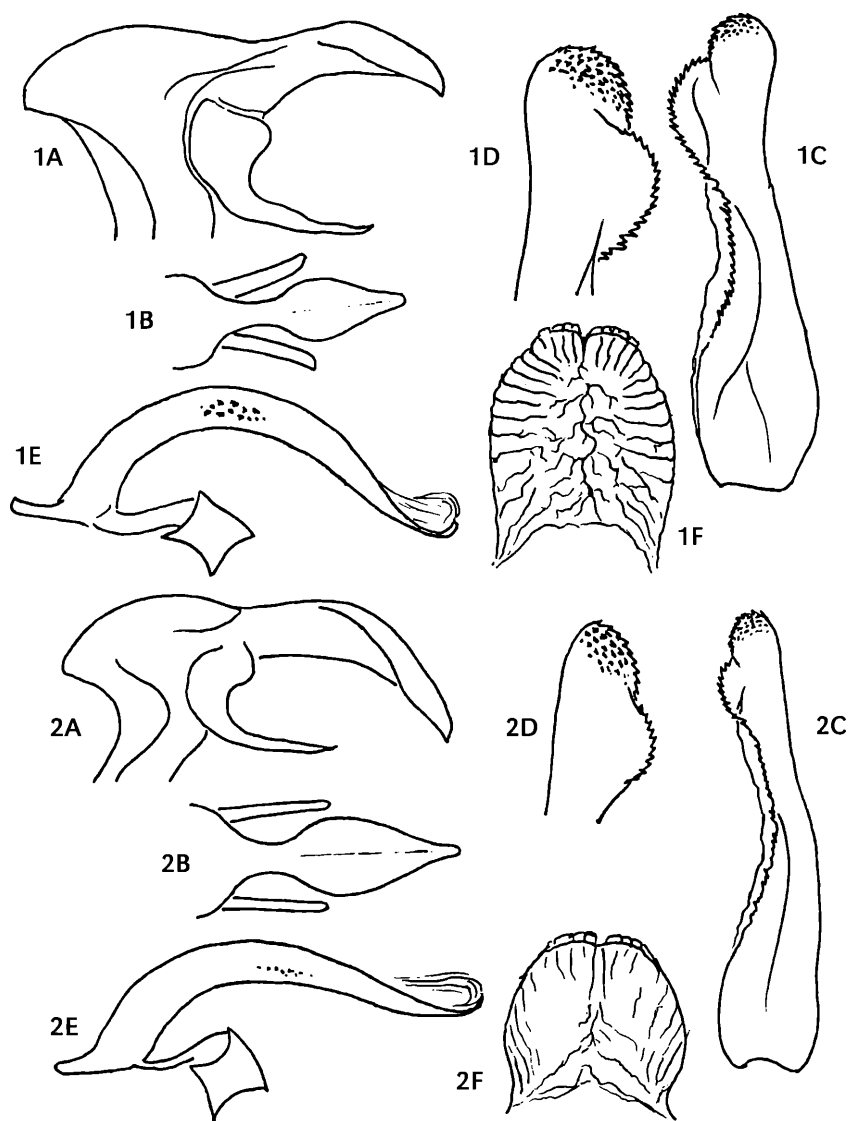
Antevaginal plate shorter than wide, gradually tapered to the distal side, which is broadly V-wise excavate or almost straight; its central part looks almost rectangular, with 1 or 2 straight central folds and a number of oblique lateral folds extending to its base.

Diagnosis and discussion

Both sexes of the new species are hardly distinguishable from *A. amathusia tonkinensis* by external features. However, the male genitalia show marked differences from the latter in the shape of the uncus and the distal part of the clasp and in the arrangement of spines on the latter. The antevaginal plate of the female is also very different from those of all species studied.

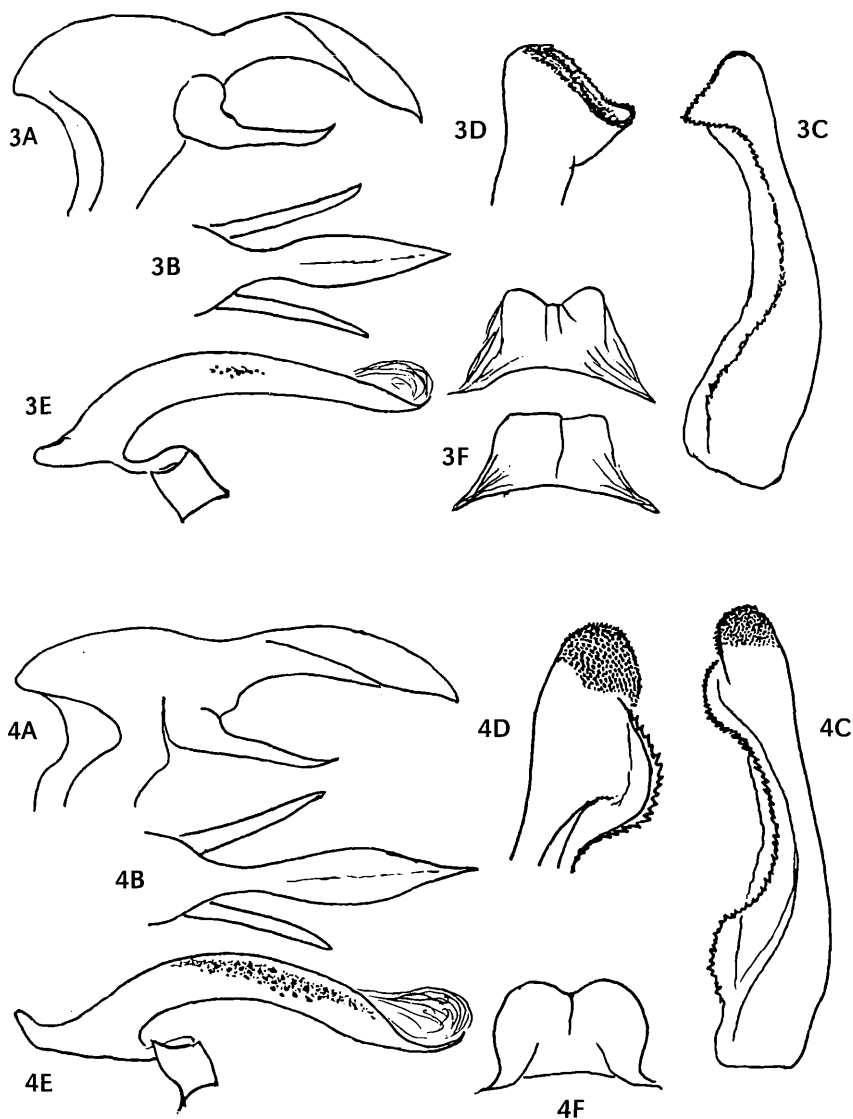
The distribution areas of the new species and *A. amathusia tonkinensis* seem to overlap widely in North and Central Vietnam (Ke bang in Quang Binh Province is the southernmost record of *A. amathusia tonkinensis*), both occurring sympatrically and synchronically in the Ba Be-Na Hang area (Lung Vi and Lung Li localities).

The single male collected in August and differing in the underside characters may be suspected to represent the second generation (wet season form) of the new species.



Figs. 1, 2: Male and female genitalia of *Aemona* Hew. (A – tegumen, uncus and subunci, lateral view; B – uncus and subunci, dorsal view; C – right clasp, dorsal view; D – end of clasp, ventral view; E – aedeagus and juxta, lateral view; F – antevaginal olate, ventral view).

Fig. 1 – *A. kontumei* spec. nov.; fig. 2 – *A. simulatrix* spec. nov.



Figs. 3, 4: Male and female genitalia of *Aemona* HEW. (A – tegumen, uncus and subunci, lateral view; B – uncus and subunci, dorsal view; C – right clasp, dorsal view; D – end of clasp, ventral view; E – aedeagus and juxta, lateral view; F – antevaginal plate, ventral view).

Fig. 3 – *A. implicata* spec. nov.; fig. 4 – *A. amathusia tonkinensis* ROTHS.

Zeuxidia masoni MOORE, [1878]

1 ♂, C. Vietnam, Quang Nam Da Nang Province, Song Thanh Nature Reserve, 03.IV.2002 (R. SHORE leg.); 1 ♂, 1 ♀, S. Vietnam, Dong Nai Province (Cat Tien National Park), 24.V.2000 (NGUYEN TRAN BINH leg.).

First record from Vietnam.

Previously this species was confused with the new species described below (MONASTYRSKII & DEVYATKIN, 2000); it can be easily distinguished from the latter by the absence of the androconial hair tuft within the cell on the hindwing. There are no significant differences between both sexes of this taxon from Vietnam and the specimens from the type locality (Tenasserim).

Zeuxidia sapphirus spec. nov.

(colour plate VII, figs. 7, 8; colour plate VIII, fig. 4)

Holotype ♂: C. Vietnam, Thua Thien Hue Province, Bach Ma National Park, 19.VII.1996 (BXP leg.).

Paratypes: 1 ♂, C. Vietnam, Thua Thien Hue Province, Phong Dien Nature Reserve, 20.VI.1998 (ALM leg.); 1 ♀, the same locality, 21.VI.1998 (T. H. MINH leg.).

Holotype BMNH, paratypes BMNH, MSU.

Description

Male (col. pl. VII, figs. 7, 8)

Forewing apex not falcate; termen straight; ternal angle strongly rounded from the end of vein 2; dorsum strongly convex; compared to other species the combined line of termen, tornus and dorsum gives an impression of a smooth rounded bend.

Upperside. The ground colour of both wings is dark brown. Forewing with a broad shiny blue, with a slight violet tinge, discal band extending from space 1b to the costal edge. Hindwing with a blue ternal patch extending from space 1b to space 3, the violet tinge being stronger than on the forewing; in the male paratype there is a tiny white spot in space 6 surrounded by bluish scales. There are four brands and hair tufts on the hindwing. The brand in space 7 is elongated, narrow and deprived of specialized scales; inside the cell there is a round androconial brand with a hair tuft inside and another tuft of long hair located under the preceding brand; there is a hair tuft enclosed into the ternal fold (pocket) on the inner edge of vein 1b.

Underside. Ground colour of both wings purple brown but not uniform, with darker basal and subbasal areas. The forewing pattern includes a dark basal area and a series of two subbasal bands extending from the costa to the lower vein of the cell. The outer subbasal band merges with a prominent discal band, which is forked from the end of cell. The discal band extends from mid costa to vein 2 on the forewing and continues on the hindwing from the costa to the end of the ternal lobe. There is also a prominent submarginal ziczac-shaped fascia on both wings. The hindwing with two dark subbasal bands continued from the forewing; there are ocellus-like submarginal elongated spots in spaces 2 and 6.

Length of forewing 51 mm.

Specialized yellowish scales cover the dorsal side of the abdominal segments 6–8.

Female (col. pl. VIII, fig. 4)

Forewing termen nearly straight; apex not falcate.

Upperside. Ground colour of both wings brown. Forewing with a broad white discal band extending from space 2 to costa; apex with a pale spot. Such a broad and well-developed white band is absent in other species having narrower and shorter yellow or blue bands. There are large submarginal spots in spaces 2 and 3 touching the discal band; another small discal drop-like spot in space 2; a creamy marginal fascia in spaces 1b–3. Hindwing with a yellow marginal line and submarginal shapeless spots surrounding veins 3–6; there is a tiny pale spot surrounded by a dark brown area in space 6.

Underside. Ground colour of both wings brown but not uniform; pattern similar to that of the male, however all markings are more prominent and distinct.

Length of forewing 59 mm.

Diagnosis and discussion

Large and very large species belonging to the genus *Zeuxidia* HÜBNER, 1826 are distributed mainly in Sunda Islands and in the Philippines, but several species are found in the mainland (Malay Peninsula, Burma and Thailand). All of them are dimorphic and have a more or less similar pattern. A distinctive characteristic of the species is the number and location of specialized androconial structures on the upperside of the hindwing in the male. Sex-brands and hair tufts are located in the cell and spaces 1a and 7. The combinations of sex-brands and hair tufts in the majority of known species is shown in Table 1.

Table 1

Characters	1	2	3	4	5	6	7
Hair tuft in space 1a	+	+	+	+	+	+	+
Sex-brand with hair inside the cell	+		+			+	+
Sex-brand without hair inside the cell					+		
Hair tuft under the brand inside the cell		+			+	+	+
Hair tuft beyond the brand inside the cell			+				
Sex-brand with hair in space 7	+	+	+	+	+	+	
Sex-brand without hair in space 7							+

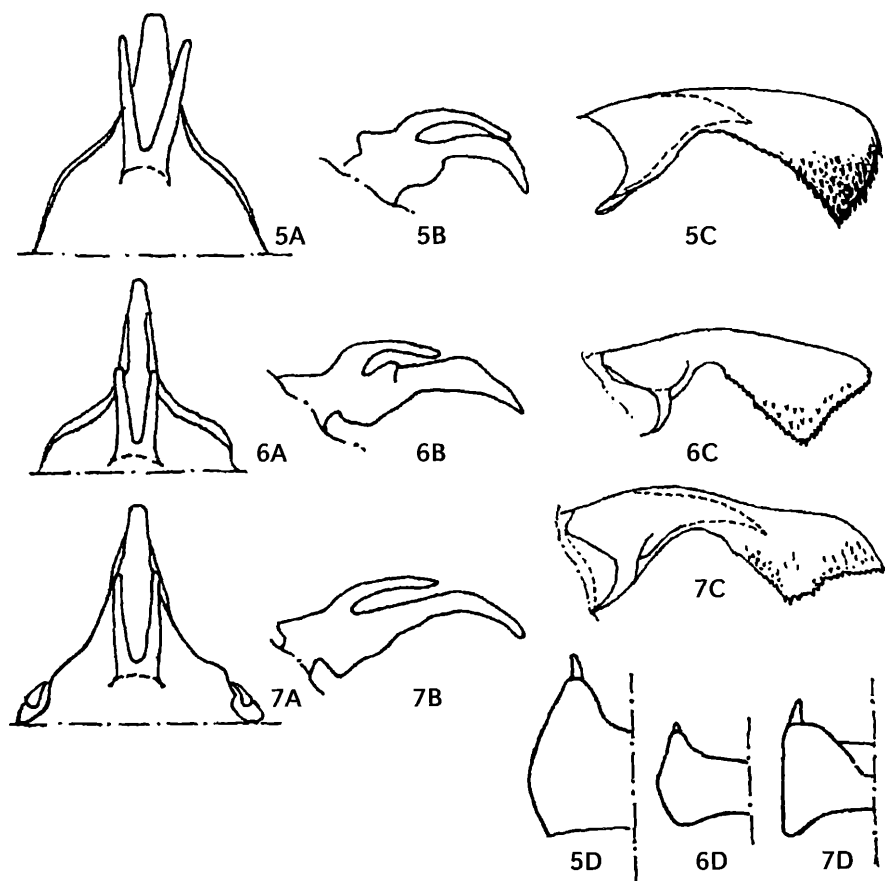
1) *Z. semperi* STICHEL, *Z. mason* MOORE, *Z. dohrni* FRUHSTORFER; 2) *Z. sibulana* HONRATH (sex-brand in cell is absent); 3) *Z. amethystus amethystus* BUTLER, *Z. a. wallacei* FELDER, *Z. a. victrix* STAUDINGER, *Z. a. zambra* CORBET, *Z. amethystina* STICHEL; 4) *Z. mesilauensis* BARLOW, BANKS & HOLLOWAY; 5) *Z. doubledayi* WESTWOOD, *Z. d. sumatrana* FRUHSTORFER, *Z. amethystus zelinda* CORBET; 6) *Z. doubledayi horsfieldi* FELDER, *Z. anaxilla* FRUHSTORFER, *Z. nicevillei* FRUHSTORFER, *Z. luxerii* HÜBNER; 7) *Z. sapphirus* spec. nov.

The new species is close to the species belonging to the group 6; however, it differs in the sex-brand in space 7 lacking hair tuft. This character is unknown in other *Zeuxidia* species. Moreover, the broad white discal band on forewing in the female is also a distinctive characteristic of the new species.

Discophora aestheta spec. nov.

(Colour plate VIII, figs. 1–3)

Holotype ♂: S. Vietnam, Dong Nai Province, Cat Tien National Park, 8.XII.2000 (ALM leg.).



Figs. 5–7: Male genitalia of *Discophora* Bsp. (A – uncus and uncus anticus, dorsal view; B – id., lateral view; C – end of right clasp, dorsal view; D – left side of juxta, frontal view).

Fig. 5 – *Discophora aestheta* spec. nov.; fig. 6 – *D. timora* WESTWOOD (W. Malaysia); fig. 7 – *D. necho* FELDER (Sumatra) (figs. 6 and 7 after AOKI, YAMAGUCHI & UEMURA: In TSUKADA, 1982).

Paratypes: 1 ♂, 1 ♀, S. Vietnam, Lam Dong Province, Cat Tien National Park (vill. No. 5), 10.V. 2000 (Bui Huu MANH leg.); 1 ♀, the same locality (Dinh Vu), 3.–5.V.2000 (Bui Huu MANH leg.). Holotype BMNH, paratypes BMNH, MSU.

Description

Male (col. pl. VIII, figs. 1, 2)

Apex not falcate; termen nearly straight and weakly concave at mid-termen. The size is similar

to *D. timora* WESTWOOD and *D. necho* FELDER. In *necho* the termen is concave at the middle as well, while in *timora* the termen is concave near the apex.

Upperside. Ground colour of both wings with a slightly iridescent dark bluish tinge; costal and terminal marginal borders blackish. In *timora* and *necho* ground colour is dark brown.

Forewing with two parallel rows of more or less equal whitish blue submarginal and discal spots in spaces 2–6; the inner spot in space 6 is divided to a bright whitish round spot displaced towards costa and to a bluish elongate spot; almost all spots have rather distinct borders and are separated from each other.

Such a characteristic pattern of two parallel rows of spots is rather unusual for *Discophora*. A similar pattern can be seen in *D. bambusae* FELDER distributed in the Philippines; however this species can be easily distinguished by a series of four or five large and black-bordered submarginal spots on the underside of the hindwing.

The males of the majority of the subspecies of *necho* have an outer row of blue separate submarginal spots; however larger arrow-like blue discal spots of the inner series are sometimes merged. The males of *timora* have only one row of submarginal small yellow spots.

Hindwing with a round black sex-brand and two rows of bluish submarginal spots; the spots of the inner row are smaller. The males of the majority of the subspecies of *necho* and *timora* are deprived of such submarginal spots.

Underside. Ground colour of both wings brownish ferruginous, with a number of paler and darker areas. Forewing with subbasal, discal and submarginal straight fasciae, the latter being less distinct. There are some black basal and subbasal spots and spots between subbasal and discal fasciae. Such fasciae can be found also in *necho* and *timora*; however sometimes they are indistinct or undulate.

Hindwing with an undulate subbasal fascia and straight discal and submarginal fasciae. There are two large eye-spots in spaces 2 and 6; similar eye-spots are found in *necho* and *timora*, being however much smaller.

Length of forewing 41 mm.

Female (col. pl. VIII, fig. 3)

Upperside. Ground colour of both wings brown, with yellowish markings.

Forewing apex not falcate; termen convex; along with the yellow marginal border there are three parallel series (rows) of separate spots. The largest submarginal spots are located in spaces 1b–5; a series of slightly smaller postdiscal separate spots are in spaces 1b–4; the spot in space 5 is merged with the spot of the discal series which stretches from 1b to 6; the spots of this series are rounded and much smaller than in other series.

The majority of the subspecies of *timora* and *necho* have a well developed yellow discal band on the forewing.

Hindwing: shape similar to that of *celinde*, *timora* and *necho*; margin bordered by yellow. There are three rows of yellow spots continued from the rows of the forewing; a row of large submarginal spots stretches from space 1b to 7; both postdiscal and discal rows of spots extend from space 2 to space 7.

The general appearance rather resembles the female of *celinde* and some subspecies of *necho* (for example *necho odora* FRUHSTORFER).

Underside. The pattern is similar to that of the male; however the ground colour is pale brownish ochreous, with large black-bordered eye-spots in spaces 2 and 6.

Length of forewing 43 mm.

Male genitalia (fig. 5)

In general, the genitalia structure of the new species shows similarity to those of *D. timora* and *D. necho*. At the same time, the new taxon's genitalia have some distinctive characteristics. Tegumen broader; uncus anticus is much longer than in the above 2 species (figs. 6–7, A, B), in lateral view it stretches for more than $\frac{1}{2}$ length of the uncus; in dorsal view it stretches for $\frac{3}{4}$ of the visible uncus length.

Clasp is robust at the base and in the median part; it is sharply constricted near apex, which is dorso-ventrally flattened and has a triangular shape similar to spade or spatula. Both dorsal and ventral sides of the apex are covered with a number of sharp spines.

The inner angle of the apex is rather acute.

The apex of the clasp in *timora* and *necho* is also triangular, however in both species the distal border of the apex is slightly concave, while in the new species it is rather convex (figs. 5–7, C). In both *timora* and *necho* the outer edge of the apex (in dorsal or ventral view) has an acute angle, while in the new species it is rounded fluently. Saccus is shorter than in *timora* and *necho*. In addition, the lateral border of the juxta has a different shape (figs. 5–7, D).

Discussion and diagnosis

Obviously, the new species belongs to the group comprising such species as *D. timora* WESTWOOD, *D. necho* FELDER, *D. celinde* STOLL, *D. ogina* GODART, *D. philippina* FRUHSTORFER and *D. bambusae* FELDER with bifurcated uncus anticus. With respect to some elements of the wing pattern and general structure of the genitalia, in particular the apex of the clasp, the new species much resembles *D. timora* and *D. necho*. At the same time, it differs from them in the main characteristics as follows.

1. The male ground colour has a slightly iridescent dark blue tinge on the upperside of both wings (in *necho* and *timora* the ground colour is brown).
2. The male has two parallel rows of more or less equal whitish blue submarginal and discal spots in spaces 2–6 of the forewing (in *timora* one row of spots is of yellowish colour, and in *necho* the postdiscal bluish spots are arrow-shaped).
3. The male has two rows of spots on the upperside of the hindwing (*timora* and *necho* are deprived of these spots).
4. Both sexes have much larger discal eye-spots on the underside of the hindwing than in *timora* and *necho*.
5. In the male genitalia, uncus anticus is much longer than in *timora* and *necho*; the distal side of the triangular apex is convex; the inner apex of the harpe is rather acute; the outer edge of the apex is rounded (in *timora* and *necho* it forms an acute angle with the distal edge); saccus is shorter than in *timora* and *necho*.
6. The female has three well-developed rows of rich yellow markings on both wings' upperside.

Nymphalidae

Argyronome laodice PALLAS, 1771

A single specimen of this species was discovered amongst material collected by A. COOMAN, labelled as: Tonkin [N. Vietnam], Reg. Hoa Binh, Coll. A. DE COOMAN, 1928.

First record from Vietnam.

The Vietnamese specimen is similar to those from S. China, this predominantly Palaearctic species being distributed eastwards to the Himalaya, E. Siberia, W. China and Japan.

Neptis arandia morrissi **subspec. nov.**

(Colour plate VIII, figs. 5, 6)

Holotype ♂: C. Vietnam, Lam Dong Province, Bi Doup – Nui Ba Nature Reserve, evergreen forest at 1,500 m, 11.IV.2002 (ALM leg.).

Paratype: 1♂, 5 ♀♀, same locality as the holotype, primary forest at 1,500 m, 04.–21.IV.2002 (ALM & BXP leg.); 1 ♂, C. Vietnam, Lam Dong, Da Lat (R. METAYE leg.).

Holotype BMNH, paratypes BMNH, MSU.

Description

Male (col. pl. VIII, figs. 5, 6)

Upperside. Ground colour of both wings is black with bright orange markings. On the forewing, the postdiscal spots in spaces 1a and 1b are joined with the postdiscal spots in spaces 2 and 3. Hindwing with a complete discal band; the postdiscal band extends from 1a to 6.

Underside. Ground colour is purplish brown, with orange, yellowish, creamy and bluish markings. On the forewing there is a series of equal bluish subcostal spots in spaces 6, 9 and 10. There are subbasal dark streaks in spaces 6 and 7 on the hindwing; the discal yellowish band is indistinct and sometimes absent; the postdiscal band is obscure as well.

Length of forewing 29.5 mm.

Female: slightly larger than the male, having similar pattern; forewing is more rounded.

Length of forewing 29–31.5 mm.

Discussion

ELIOT (1969) recognized five subspecies of *N. arandia*, viz., *N. a. arandia* OBERTHÜR, 1876 (TL: China); *N. a. manardia* ELIOT, 1969 (TL: N.W. Yunnan); *N. a. pila* TYTLER, 1940 (TL: South Shan States); *N. a. gafuri* TYTLER, 1915 (TL: Naga Hills) and *N. a. melba* EVANS, 1912 (TL: Sikkim). Compared to these races, the new subspecies has postdiscal spots in spaces 1a–1b and 2–3 on the upperside, joined in space 1b; all orange markings are broader and brighter.

Underside is generally darker. The subcostal spots in spaces 6, 9 and 10 larger and equal, while in other races they are smaller and gradually reduced from the costal area to space 6, extending to space 5. Upper postdiscal orange spot in space 6 on the forewing is larger. The discal and postdiscal bands on the hindwing are unclear, while in other races they are whitish-yellow and prominent.

Male genitalia. The structure is similar to that of the nominate subspecies figured in ELIOT (1969).

The species is dedicated to Mr. H. E. WARWICK MORRIS, British Ambassador to Vietnam, who supported the publication of our book "Common butterflies of Vietnam".

Neptis genulfa OBERTHÜR (1908) **stat. rev.**

The species *genulfa* was described by OBERTHÜR (1908) from W. China (Tse-Kou). Later it was reduced to a subspecies of *N. (Bimbisara) sankara* (FRUHSTORFER, 1913) and then again elevated to species (GAEDE, 1930). ELIOT (1969) found undoubted similarity between *genulfa* and *speyeri* (STAUDINGER, 1887) and gave it a new status *Neptis speyeri genulfa*. The specimens found in the southern part of C. Vietnam show a very high similarity to *genulfa*. A new comparison shows the following differences between the typical *genulfa* and *speyeri*.

Shape of forewing: termen is more rounded in *genulfa* and more produced at apex in *speyeri*. Upperside: on the forewing, the streaks in the cell and beyond the cell are larger and thicker (in *speyeri* they are narrower) and have a different shape; there is a rather indistinct and dusty white spot on the discocellular bar between the cell streak and the streak beyond the cell (there is no discocellular spot on the upperside in *speyeri*); the submarginal fascia on the forewing is prominent (obscure in *speyeri*); postdiscal spots in spaces 1a and 1b on the forewing are broad (in *speyeri* they are rather narrow); on the hindwing, there is a prominent postdiscal band (in *speyeri* it is very narrow and indistinct);

Underside: the nominate *genulfa* has the same differences as on the upperside; moreover, in *genulfa* there is a prominent subbasal white streak on the hindwing (in *speyeri* it is dull, narrow and short); the subbasal area in *genulfa* is narrower than in *speyeri*.

In addition, there are some differences in the clasp of the male genitalia. Though in both *genulfa* and *speyeri* the terminal hook is absent, in *speyeri* there is a broader space between harpe and ampulla at the end of the clasp (fig. 9, A, B).

Thus, it seems to be correct to restore the original species status of the taxon *genulfa*.

Neptis genulfa miennamica **subspec. nov.**

(colour plate VIII, figs. 7, 8)

Holotype ♂: C. Vietnam, Lam Dong Province, Bi Doup – Nui Ba Nature Reserve, primary forest at 1,500 m, 6.IV.2002 (ALM leg.).

Paratypes: 3 ♀♀, same locality as the holotype, riverine forest at 1,300 m, 14.–26.IV.2002 (ALM & BXP leg.).

Holotype BMNH, paratypes BMNH, MSU.

Description

A medium-sized species. Both sexes are alike, but the female is slightly larger.

Male (col. pl. VIII, figs. 7, 8)

Upperside: ground colour of both wings black, with white markings; the cell streak and the streak beyond the cell are merged; the streak beyond the cell is narrowly continued to the postdiscal area in space 5; upper and lower postdiscal bands are well developed; on hindwing, there are well developed discal and postdiscal bands with an unclear discal spot in space 7.

Underside: ground colour of both wings dark brown but not uniform; there is a black area under the cell streak on the forewing. The pattern is similar to the upperside except the marginal and submarginal bands, which are broader and more distinct; there is a prominent subbasal streak on the hindwing.

Length of forewing 25.5 mm.

Female. Similar to the male in all respects, but larger and wings broader.
Length of forewing 29.0 mm.

Male genitalia (fig. 9, B).

The genital armatures of both *speyeri* and *genulfa* are similar to the new taxon. In all cases, the clasp lacks a terminal hook, characteristic for the majority of the *Neptis* species. At the same time, in the new subspecies there is little empty space between harpe and ampulla at the end of the clasp.

Diagnosis

The type of *genulfa* OBERTHÜR is deposited in BMNH (1 ♀, Tse Kou, China, DUBERNARD leg., 1903). The new subspecies differs from the nominate one in the following characters.

Upperside: the submarginal fascia on the forewing is broader; the spots of the postdiscal band are more compact; discocellular spot smaller; the postdiscal white band on hindwing broader, while the black discal area is narrower. Underside: on the forewing, the area under the streak in the cell and beyond the cell is black; the spots of the postdiscal band are more compact; the postdiscal band on the hindwing is much broader; the area between the discal and postdiscal bands is narrower; the area between the postdiscal and submarginal bands is broader.

Discussion

It is undoubted, that morphologically *speyeri* and *genulfa* are closely related. However, *speyeri* is distributed very locally and isolated in from eastern Siberia (Amur Basin) to the northern areas of the Korea Peninsula (ELIOT, 1969; KURENTZOV, 1970), while the distribution area of *genulfa* has been known as being only N.W. Yunnan (Upper Mekong valley). The locality of the new subspecies in southern Vietnam also seems isolated; however, both subspecies show much more similarity to each other than to *N. speyeri*.

Neptis philyroides mienbaca subsp. nov.

(colour plate IX, figs. 1, 2)

Holotype ♂: N. Vietnam, Bac Can Province, Lung Li, 860 m, 1.V.2001 (BXP leg.).

Paratype: 1 ♀, same locality and date as the holotype.

Holotype MSU; paratype BMNH.

Description

Both sexes are alike in the size and pattern.

Male (col. pl. IX, figs. 1, 2).

Upperside. Ground colour black, with slightly creamy white markings; the streak in the cell is thinner than the streak beyond the cell; on the forewing, all markings are small but well developed and separate; there is a broad space between the postdiscal spots in spaces 1b and 2; a series of subcostal spots approaches the upper postdiscal spots. On the hindwing, the discal band is rather narrow, with a well separated spot in space 6, elongated towards apex; the postdiscal band is prominent, while the submarginal one is obscure.

Underside. The ground colour of both wings is mainly dull brown (black on forewing in spaces 1a to 3); markings similar to the upperside, but all of them are white, with a slightly bluish

tinge, bordered by black; on the hindwing there is a short subbasal streak in the cell obscurely extended to spaces 6 and 7.

Length of forewing: 33 mm in the male and 34 mm in the female.

Male genitalia (fig. 10, A).

In general, similar to those of the nominate subspecies figured by ELIOT (1969). However, the terminal process on the ampulla is long and pointed, while in the nominate subspecies it is shorter and serrate (fig. 10, A, B). In KURENTZOV (1970), the nominate subspecies is figured with a sickle-shaped terminal process.

Discussion and diagnosis

With respect to the main characteristics listed, the specimens found in Vietnam show similarity to the three other known subspecies of *N. philyroides* STAUDINGER, distributed from eastern Siberia to Korea, Central China and Taiwan:

Neptis philyroides philyroides STAUDINGER, 1887 (Siberia to Korea)

Neptis philyroides sonani MURAYAMA, 1941 (Taiwan)

Neptis philyroides simingshana MURAYAMA, 1980 (Zhejiang, E. China).

At the same time, the new subspecies differs from other races in the characters as follows.

On the upperside, all creamy white markings are smaller and narrower; on the forewing, the series of subcostal spots approaches the upper postdiscal spots; the distance between the postdiscal spots in spaces 1b and 2 is greater; on the hindwing, the spots of the discal band are more elongated toward the apex; the space between the discal and postdiscal bands is broader.

The underside of both wings has dark brown ground colour, with a black area in spaces 1a-3 of the forewing; all markings are slightly smaller, narrower and bordered by black.

Neptis antilope LEECH, 1892

1 ♂, N. Vietnam, Bac Can Province, Lung Li, 860 m, 01.V.2001 (BXP leg.).

First record from Vietnam.

This species was recently mentioned from S.E. China (Guangdong Province) (MORISHITA, 2000).

Neptis nemorum OBERTHÜR, 1906

1 ♂, C. Vietnam, Ha Tinh Province, Vu Quang Nature Reserve, 1,500 m, primary evergreen forest, 03.IV.2000 (ALM leg.).

First record from Vietnam.

This rather rare species has never been recorded in the adjacent countries.

Neptis philyra MENETRIES, 1859

1 ♀, C. Vietnam, Ha Tinh Province, Vu Quang Nature Reserve, 1,500 m, primary evergreen forest, 03.IV.2000 (ALM leg.).

First record from Vietnam.

This record possibly represents a new subspecies; however, additional material is required.

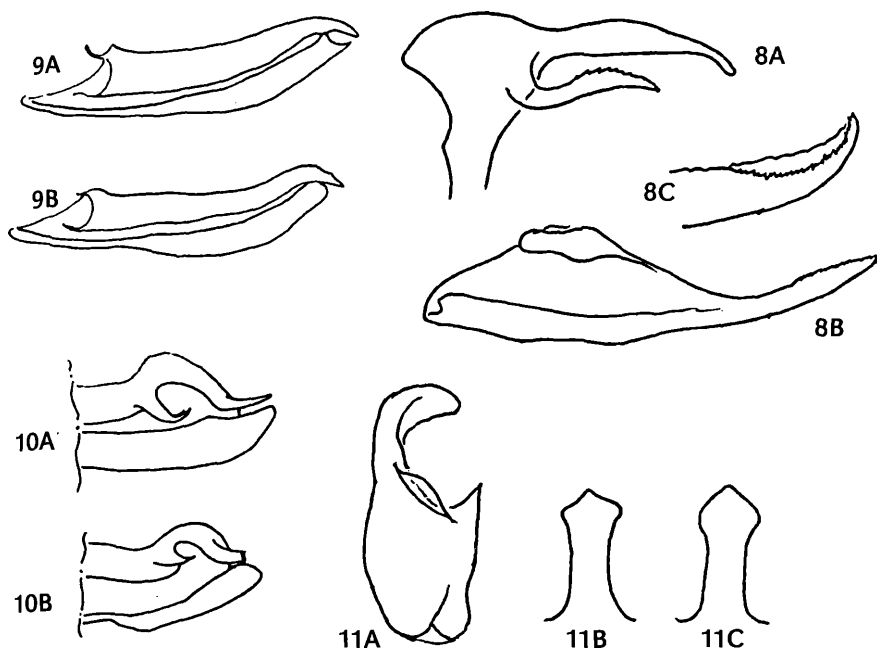


Fig. 8: *Lethe philesanoides* spec. nov., male genitalia (A - tegumen, uncus and subunci, lateral view; B - right clasp, lateral view; C - end of clasp, dorsal view).

Fig. 9: Male genitalia (right clasp) of *Neptis* FABR. A - *N. speyeri* STGR.; B - *N. genulfa* OВТН.

Fig. 10: Male genitalia (end of right clasp) of *Neptis* FABR. A - *N. philyroides mienbaca* subspec. nov.; B - *N. philyroides philyroides* STGR.

Fig. 11: *Euaspa minae* spec. nov., male genitalia (A - left clasp, ventral view; B - uncus, dorsal view, holotype; C - id., paratype).

Abrota ganga (MOORE, 1857)

1 ♂, 1 ♀, C. Vietnam, Quang Nam province, Ma Cooih district, 880 m, primary evergreen forest, 28.IX.2002 (R. SHORE leg.).

First record from Vietnam.

Euthalia narayana GROSE-SMITH, 1887

1 ♀, C. Vietnam, Lam Dong Province, Dalat, VIII.1966 (A. BEDFORD RUSSELL leg.).

First record from Vietnam.

This specimen was found in the A. BEDFORD RUSSELL collection deposited in the BMNH. A comparison to the type of *narayana* GROSE-SMITH (type locality: Burma) showed that the specimen from Dalat is not different from it in its principal characters.

Euthalia confucius gibbsi subsp. nov.

(colour plate IX, figs. 3, 4)

Holotype ♂: C. Vietnam, Ha Tinh Province, Huong Son Forest Complex, cleared forest, 400 m, 12.V.2001 (FR leg.).

Paratype: 1 ♂, same locality as the holotype, 850 m, logged forest, 09.V.2001 (FR leg.).

Holotype BMNH, paratype MSU.

Description

Male (col. pl. IX, figs. 3, 4)

Upperside. Ground colour dull greenish brown. On the forewing, there is a series of yellowish creamy discal markings, extending from space 1b to 7, slightly bordered by black; occasionally there is a small spot in space 1a. Postdiscal spots in spaces 6–9 are smaller and surrounded by black areas. The marginal edge is black, separated by a broad pale submarginal area. In space 2 there is an arrow-like double spot; another small spot of the band is located in space 1b. In the cell, there are a short basal streak and two discocellular spots bordered by black; a small round spot at the base of space 2. On the hindwing, there is a broad creamy discal band gradually tapering to the tornus; a small separate spot continuing this band is located in space 1b. In the cell, there is a discocellular pale spot bordered by black. The marginal edge and submarginal area are bordered by black fasciae.

Underside. The ground colour of the forewing is pale brown, while that of the hindwing is greenish blue; the pattern is similar to the upperside, however all markings are broader. The markings of the forewing are bordered by black; on the hindwing, the inner edge of the discal band has a faint black border. The marginal area is pale brown on both wings.

Length of forewing 48–50 mm.

Discussion and diagnosis

There are two subspecies of *E. confucius* WESTWOOD, the nominate one being distributed in Central China and the ssp. *sadona* TYTLER being known from N.E. Burma. The new taxon was compared to the type of *sadona* and to a large series of the nominate subspecies. The new subspecies is similar in size to the nominate one, but larger than *sadona*. All subspecies show similarity in the wing pattern and markings, however in the new taxon the latter are richer (in particular, in spaces 1a and 1b of the forewing), much broader and surrounded by a black prominent border on the forewing underside.

The new subspecies is dedicated to CHRISTOPHER and WENDY GIBBS, who supported the publication of, and participated in, the book "Common butterflies of Vietnam".

Euthalia pyrrha LEECH, 1892

1 ♀, N. Vietnam, Lao Cai Province, Hoang Lien Nature Reserve, 1,500 m, 01.IX.1998 (Vu VAN LIEN leg.); 1 ♀, C. Vietnam, Nghe An Province, Pu Mat Nature Reserve, primary forest, 1,200 m, 18.VII.1998 (FFI expedition leg.).

First record from Vietnam.

Both specimens are preserved in MNHN and were identified by NGUYEN THI HONG, the curator of the Rhopalocera collection in the Paris Museum.

Parasarpa zayla (DOUBLEDAY, [1848])

1 ♂, N. Vietnam, Lao Cai Province, Hoang Lien Nature Reserve (in the vicinity of Sa Pa settlement) 1,500 m, VIII.2001 (ALM leg.).
First record from Vietnam.

Rohana parvata burmana (TYTLER, 1940)

2 ♂♂, N. Vietnam, Tuyen Quang province, Khau Tep, Na Hang Nature Reserve, 15.X.2002 (BXP leg.).
First record from Vietnam.

Hestina assimilis (LINNAEUS, 1758)

1 ♂, N. Vietnam, Tuyen Quang province, Khau Tep, Na Hang Nature Reserve, 16.X.2002 (BXP leg.).
First record from Vietnam.

Riodinidae

Dodona speciosa MONASTYRSKII & DEVYATKIN, 2000

Addition to the description.

1 ♂, C. Vietnam, Lam Dong Province, Col du Da Troun, 1,225 m, 26.I.1958 (R. METAYE leg.).
A further specimen of this recently described species was found in the METAYE collection in MNHN.

This is a new locality for this species in Vietnam. The specimen is in good condition and, in particular, it has the tornal part of the hindwing which was absent in the sole type specimen (MONASTYRSKII & DEVYATKIN, 2000). Judging from this, the species belongs to the tailed group of *Dodona*, displaying a pair of small black tails.

Dodona katerina **sombra** subspec. nov.

(colour plate IX, figs. 5, 6)

Holotype ♂, Central Vietnam, Ha Tinh Province, Vu Quang Nature Reserve, 1,500 m, 5.IV.2000 (ALM leg.).

Description

Male (col. pl. IX, figs. 5, 6)

Upperside. Forewing: ground colour uniform blackish brown; an oblique ochreous narrow band across mid-cell to mid-dorsum; a series of small discal spots from mid-costa to space 1b, the latter being ochreous, the others white; a rather diffuse irregular-shaped spot in space 3; 2 subapical spots, the one near the costa being much smaller; an irregular series of sub-

marginal spots, those in spaces 1b and 2 being ochreous and diffuse. Hindwing: even more uniform, with only faint traces of suffused discal and submarginal spots.

Underside. Forewing: ground colour the same as on the upperside, becoming dark chocolate brown along costa and termen; all markings the same but more sharply defined; an additional spot at the wing origin and an additional basal band of 3 spots; markings in the basal and dorsal parts of the wing with a ochreous tinge. Hindwing: ground colour dark chocolate brown, dorsum narrowly whitish; another pale suffused stripe, parallel to dorsum, across spaces 1a and 1b; 4 silky-white bands, all directed to the tornus, in the basal and discal areas, that from mid-costa being the widest and the one closest to the termen being very short and not reaching the costa; the tornal area as in the nominate subspecies.

Diagnosis

The new subspecies differs from the nominate one described from Gia Lai Province (MONASTYRSKII & DEVYATKIN, 2000) rather strikingly in the very much darker and uniform ground colour of both sides of the wings, as well as in the very reduced and diffusely shaped white pattern of the underside. The male genitalia, however, show no principal differences from those of the nominate subspecies.

Taxila haquinus FABRICIUS, 1793

First record from Vietnam.

One female of this species was found in Collection Generale of the MNHN in Paris, labelled: Cochinchine, 1875.

This species was listed from Laos (OSADA et al., 1999).

Abisara abnormis MOORE, [1884]

First record from Vietnam.

A single specimen was found in the General Collection of the MNHN, labelled as Montagnes de Chau Doc, Cochinchine, 1877, Dr HARMAND.

Lycaenidae

Euaspa minae spec. nov.

(colour plate IX, figs. 7, 8)

Holotype ♂: Central Vietnam, Lam Dong Province, Bi Doup – Nui Ba National Park, 1300 m, riverine forest, 14.IV.2002 (ALM leg.).

Paratype: 1 ♂, the same locality, 18.IV.2002 (BXP leg.).

Description

Male (col. pl. IX, figs. 7, 8)

Upperside. Ground colour dark brown. Forewing: cell, most part of spaces 1a, 1b and bases of spaces 2 and 3 filled with shining violet blue; orange markings at the end of the cell and in space 3 bright and sharply defined; in the paratype, there is also a diffuse orange marking in space 2. Hindwing uniform brown.

Underside. Forewing ground colour the same as on the upperside; space 1a, basal part of space 1b and termen near tornus paler, yellowish; discal orange markings in spaces 2 (diffuse in the paratype), 3 and at the end of cell; submarginal white fascia parallel to termen, from costa to space 3, outwardly broadly washed with whitish. Hindwing: ground colour brown as on the upperside, densely suffused with whitish in the basal and submedian areas; basal area with 3 rounded white-ringed spots, arranged in a line along base, that at the costa connected with the brown median fascia; the latter white-bordered, sharply constricted in space 2, extended and rounded in space 1c; submarginal area wide, brown, with small triangular V-marks in spaces 1c to 5, suffused with whitish between veins near termen, with 2 orange spots at tornus in spaces 1b–1c and 2, the latter with a black spot.

Length of forewing 16.5–17 mm.

♂-genitalia (fig. 11).

Uncus almost parallel-sided in dorsal view, its distal part extended and bluntly triangular ending (somewhat variable among the 2 specimens). Clasp (ventral view) with a single basal process and a small flat ventral lobe; distal part of clasp strongly curved inwards, not extended, acutely ending. Aedeagus robust, long and straight, its distal end spoon-like extended.

Discussion

The external characters in the genus *Euaspa* MOORE, 1884 are not highly reliable, showing no differences between the males and the females and varying individually, as it is seen even from our 2 specimens. The characters of the genitalia, which are of main diagnostic importance, were discussed in a paper by KOIWAYA (2002) where 3 new species were described. Our new species seems to combine the characters of several known taxa, recalling *E. hishikawai* KOIWAYA, 2002 (N. Laos) in the shape of the uncus (however not so strongly produced) and being similar to *E. nosei* KOIWAYA, 2002 (N. Myanmar) in the shape of the clasp, while its hindwing underside resembles that of *E. koizumii* KOIWAYA, 2002 (N. Laos).

The species is dedicated to Mrs. MIN McDONALD, our good friend and kind hostess both in Hanoi and in London.

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Explanation of colour plate V (p. 263):

- Fig. 1: *Chilasa imitata* spec. nov., holotype ♂. C. Vietnam, Lam Dong Province, Dong Mang district, Bi Doup – Nui Ba Nature Reserve, 2,200 m, 16.IV.2002, A. L. MONASTYRSKII leg., upperside.
- Fig. 2: Id., underside.
- Fig. 3: *Papilio prexaspes intricatus* subspec. nov., holotype ♂. N. Vietnam, Lang Son Province, Huu Lien Nature Reserve, 200 m, 17.IV.2000, FR leg., upperside.
- Fig. 4: Id., underside.
- Fig. 5: *Elymnias hypermnestra robinsona* subspec. nov., holotype ♂. S. Vietnam, Con Dao (Con Son Is.), 15.IX.1967, A. BEDFORD RUSSELL leg., upperside.
- Fig. 6: *Meandrusa sciron dalata* subspec. nov., holotype ♂. C. Vietnam, Lam Dong Province, Dong Mang district, Bi Doup-Nui Ba Nature Reserve, 2,200 m, 16.IV.2002, A. L. MONASTYRSKII leg., upperside.
- Fig. 7: *Elymnias hypermnestra robinsona* subspec. nov., paratype ♀. S. Vietnam, Con Dao (Con Son Is.), IX.1967, A. BEDFORD RUSSELL leg., upperside.
- Fig. 8: Id., underside.

Explanation of colour plate VI (p. 265):

- Fig. 1: *Lethe philesanoides* spec. nov., holotype ♂. N. Vietnam, Hai Phong Province, Cat Ba National Park, limestone forest, 1.VI.2001, A. L. MONASTYRSKII leg., upperside.
- Fig. 2: Id., underside.
- Fig. 3: *Lethe philesanoides* spec. nov., paratype ♀. N., Vietnam Lang Son Province, Huu Lien Nature Reserve, limestone forest, 29.VII.2000, Frontier leg., upperside.
- Fig. 4: *Delias vietnamensis* MONASTYRSKII & DEVYATKIN, 2000, ♀. C. Vietnam, Lam Dong Province, Dong Mang district, Long Lanh (Bi Doup area), 1,700 m, 9.–26.IV.2002, A. L. MONASTYRSKII & BUI XUAN PHUONG leg., upperside.
- Fig. 5: *Aemona kontumei* spec. nov., holotype ♂. C. Vietnam, Kon Tum Province, Ngoc Linh Nature Reserve, 1700 m, 2.IV.1998, A. L. MONASTYRSKII leg., upperside.
- Fig. 6: Id., underside.
- Fig. 7: *Aemona kontumei* spec. nov., paratype ♀. C. Vietnam, Kon Tum Province, Ngoc Linh Nature Reserve, 1700 m, 30.III.1998, A. L. MONASTYRSKII leg., upperside.
- Fig. 8: *Ethope diademoides metayei* subspec. nov. holotype ♂. C. Vietnam, Lam Dong Province, Col de Blao, Route QL 20 km, (700 m), 23.II.1975 R. METAYE leg., upperside.

Explanation of colour plate VII (p. 267):

Fig. 1: *Aemona simulatrix* spec. nov., holotype ♂. C. Vietnam, Gia Lai Province, Kon Ka Kinh Nature Reserve, 1400 m, 24.IV.1999, A. L. MONASTYRSKII leg., upperside.

Fig. 2: Id., underside.

Fig. 3: *Aemona simulatrix* spec. nov., paratype ♀. C. Vietnam, Gia Lai Province, Kon Cha Rang Nature Reserve, 1000 m, 11.III.1999, A. L. MONASTYRSKII leg., upperside.

Fig. 4: *Aemona implicata* spec. nov., paratype ♀, C. Vietnam, Ha Tinh Province, Vu Quang Nature Reserve, 1500 m, 3.IV.2000, BUI XUAN PHUONG leg., upperside.

Fig. 5: *Aemona implicata* spec. nov., holotype ♂, C. Vietnam, Ha Tinh Province, Vu Quang Nature Reserve, 1500 m, 6.V.2000, A. L. MONASTYRSKII leg., upperside.

Fig. 6: Id., underside.

Fig. 7: *Zeuxidia sapphirus* spec. nov., holotype ♂. C. Vietnam, Thua Thien Hue Province, Bach Ma National Park, 19.VII.1996, BUI XUAN PHUONG leg., upperside.

Fig. 8: Id., underside.

Explanation of colour plate VIII (p. 269):

Fig. 1: *Discophora aestheta* spec. nov., holotype ♂. S. Vietnam, Dong Nai Prov., Cat Tien National Park, 8.XII.2000, A. L. MONASTYRSKII leg., upperside.

Fig. 2: Id., underside.

Fig. 3: *Discophora aestheta* spec. nov., paratype ♀. S. Vietnam, Lam Dong Prov., Cat Tien National Park (Dinh Vu), 3.–5.V.2000, BUI HUU MANH leg., upperside.

Fig. 4: *Zeuxidia sapphirus* spec. nov., paratype ♀. C. Vietnam, Thua Thien Hue Prov., Phong Dien Nature Reserve, 21.VI.1998, T. H. MINH leg., upperside.

Fig. 5: *Neptis arandina morrissi* subspec. nov., holotype ♂. C. Vietnam, Lam Dong Prov., Bi Doup – Nui Ba Nature Reserve, evergreen forest, 1500 m, 11.IV.2002, A. L. MONASTYRSKII leg., upperside.

Fig. 6: Id., underside.

Fig. 7: *Neptis genulfa miennamica* subspec. nov., holotype ♂. C. Vietnam, Lam Dong Prov., Bi Doup – Nui Ba Nature Reserve, 1500 m, primary forest, 6.IV.2002, A. L. MONASTYRSKII leg., upperside.

Fig. 8: Id., underside.

Explanation of colour plate IX (p. 271):

Fig. 1: *Neptis philyroides mienbaca* subspec. nov., holotype ♂. N. Vietnam, Bac Can Prov., loc. Lung Li, 860 m, 1.V.2001, Bui Xuan Phuong leg., upperside.

Fig. 2: Id., underside.

Fig. 3: *Euthalia confucius gibbsi* subspec. nov., holotype ♂. C. Vietnam, Ha Tinh Prov., Huong Son Forest Complex, cleared forest, 400 m, 12.V.2001, Frontier leg., upperside.

Fig. 4: Id., underside.

Fig. 5: *Dodona katerina sombra* subspec. nov., holotype ♂. C. Vietnam, Ha Tinh Prov., Vu Quang Nature Reserve, 1500 m, 5.IV.2000, A. L. MONASTYRSKII leg., upperside.

Fig. 6: Id., underside.

Fig. 7: *Euaspa minae* spec. nov., holotype ♂. C. Vietnam, Lam Dong Prov., Bi Doup – Nui Ba National Park, 1300 m, riverine forest, 14.IV.2002, A. L. MONASTYRSKII leg., upperside.

Fig. 8: Id., underside.

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Colour plate V

MONASTYRSKII, A. L. & A. L. DEVYATKIN: New taxa and new records of butterflies from Vietnam, 2 (Lepidoptera, Rhopalocera). – *Atalanta* **34** (1/2): 75–109.

Fig. 1: *Chilasa imitata* spec. nov., holotype ♂. C. Vietnam, Lam Dong Province, Dong Mang district, Bi Doup – Nui Ba Nature Reserve, 2,200 m, 16.IV.2002, A. L. MONASTYRSKII leg., upperside.

Fig. 2: Id., underside.

Fig. 3: *Papilio prexaspes intricatus* subspec. nov., holotype ♂. N. Vietnam, Lang Son Province, Huu Lien Nature Reserve, 200 m, 17.IV.2000, FR leg., upperside.

Fig. 4: Id., underside.

Fig. 5: *Elymnias hypermnestra robinsona* subspec. nov., holotype ♂. S. Vietnam, Con Dao (Con Son Is.), 15.IX.1967, A. BEDFORD RUSSELL leg., upperside.

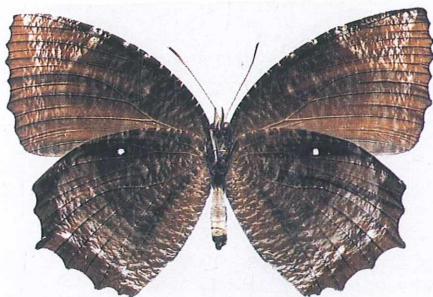
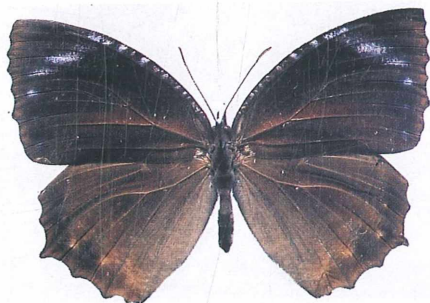
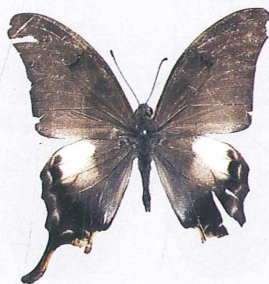
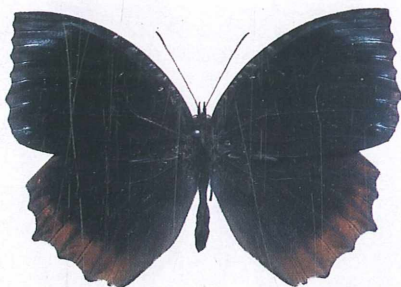
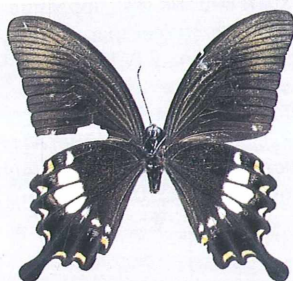
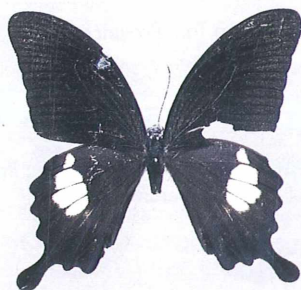
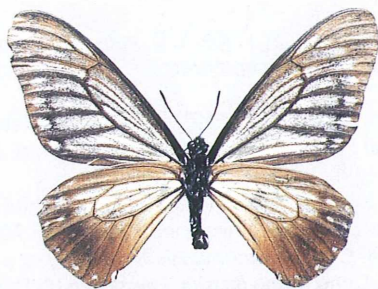
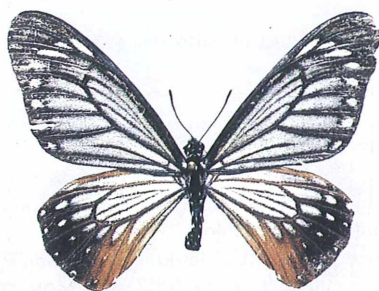
Fig. 6: *Meandrusa sciron dalata* subspec. nov., holotype ♂. C. Vietnam, Lam Dong Province, Dong Mang district, Bi Doup-Nui Ba Nature Reserve, 2,200 m, 16.IV.2002, A. L. MONASTYRSKII leg., upperside.

Fig. 7: *Elymnias hypermnestra robinsona* subspec. nov., paratype ♀. S. Vietnam, Con Dao (Con Son Is.), IX.1967, A. BEDFORD RUSSELL leg., upperside.

Fig. 8: Id., underside.

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Colour plate V



Colour plate VI

MONASTYRSKII, A. L. & A. L. DEVYATKIN: New taxa and new records of butterflies from Vietnam, 2 (Lepidoptera, Rhopalocera). – *Atalanta* **34** (1/2): 75–109.

Fig. 1: *Lethe philesanoides* spec. nov., holotype ♂. N. Vietnam, Hai Phong Province, Cat Ba National Park, limestone forest, 1.VI.2001, A. L. MONASTYRSKII leg., upperside.

Fig. 2: Id., underside.

Fig. 3: *Lethe philesanoides* spec. nov., paratype ♀. N., Vietnam Lang Son Province, Huu Lien Nature Reserve, limestone forest, 29.VII.2000, Frontier leg., upperside.

Fig. 4: *Delias vietnamensis* MONASTYRSKII & DEVYATKIN, 2000, ♀. C. Vietnam, Lam Dong Province, Dong Mang district, Long Lanh (Bi Doup area), 1,700 m, 9.–26.IV.2002, A. L. MONASTYRSKII & BUI XUAN PHUONG leg., upperside.

Fig. 5: *Aemona kontumei* spec. nov., holotype ♂. C. Vietnam, Kon Tum Province, Ngoc Linh Nature Reserve, 1700 m, 2.IV.1998, A. L. MONASTYRSKII leg., upperside.

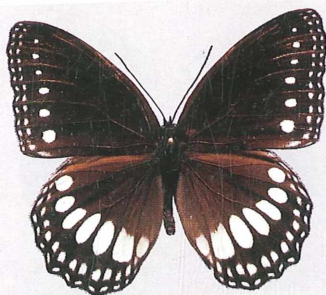
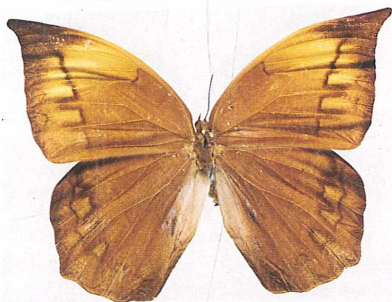
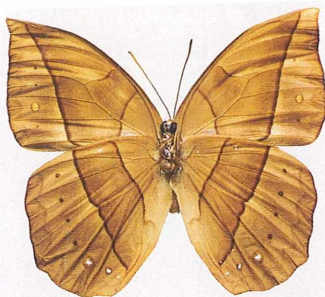
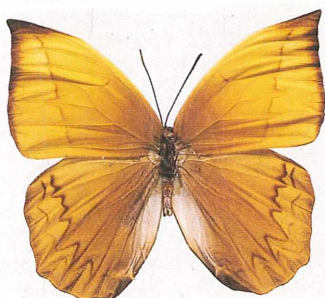
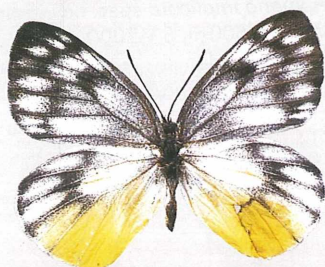
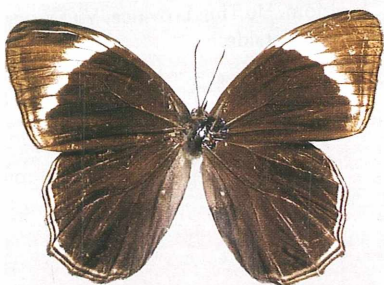
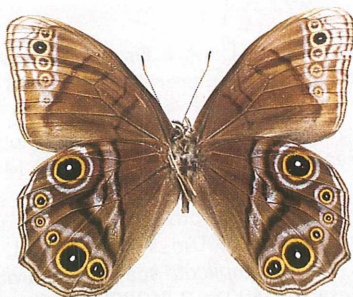
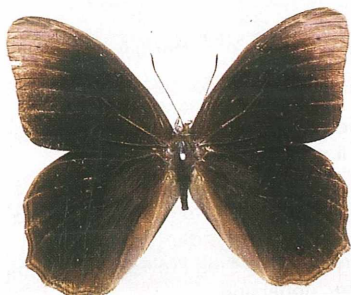
Fig. 6: Id., underside.

Fig. 7: *Aemona kontumei* spec. nov., paratype ♀. C. Vietnam, Kon Tum Province, Ngoc Linh Nature Reserve, 1700 m, 30.III.1998, A. L. MONASTYRSKII leg., upperside.

Fig. 8: *Ethope diademoides metayei* subspec. nov. holotype ♂. C. Vietnam, Lam Dong Province, Col de Blao, Route QL 20 km, (700 m), 23.II.1975 R. METAYE leg., upperside.

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Colour plate VI



Colour plate VII

MONASTYRSKII, A. L. & A. L. DEVYATKIN: New taxa and new records of butterflies from Vietnam, 2 (Lepidoptera, Rhopalocera). – *Atalanta* **34** (1/2): 75–109.

Fig. 1: *Aemona simulatrix* spec. nov., holotype ♂. C. Vietnam, Gia Lai Province, Kon Ka Kinh Nature Reserve, 1400 m, 24.IV.1999, A. L. MONASTYRSKII leg., upperside.

Fig. 2: Id., underside.

Fig. 3: *Aemona simulatrix* spec. nov., paratype ♀. C. Vietnam, Gia Lai Province, Kon Cha Rang Nature Reserve, 1000 m, 11.III.1999, A. L. MONASTYRSKII leg., upperside.

Fig. 4: *Aemona implicata* spec. nov., paratype ♀, C. Vietnam, Ha Tinh Province, Vu Quang Nature Reserve, 1500 m, 3.IV.2000, BUI XUAN PHUONG leg., upperside.

Fig. 5: *Aemona implicata* spec. nov., holotype ♂, C. Vietnam, Ha Tinh Province, Vu Quang Nature Reserve, 1500 m, 6.V.2000, A. L. MONASTYRSKII leg., upperside.

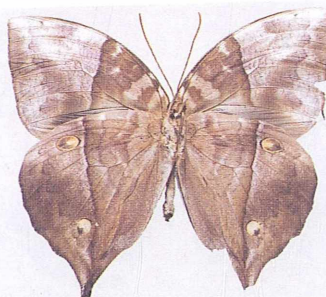
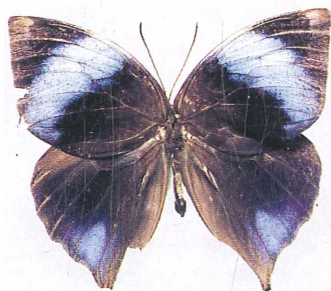
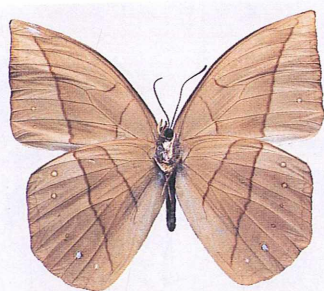
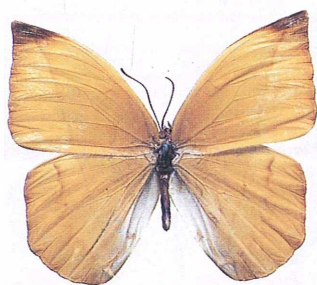
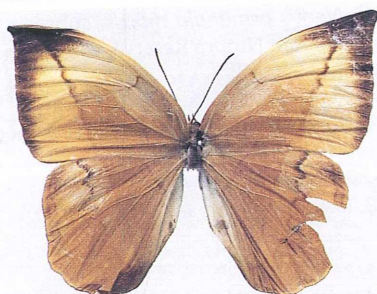
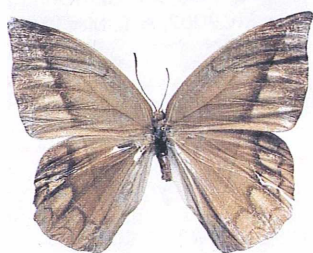
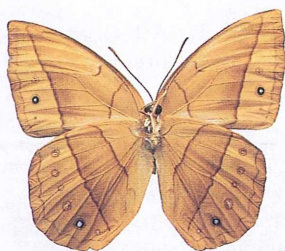
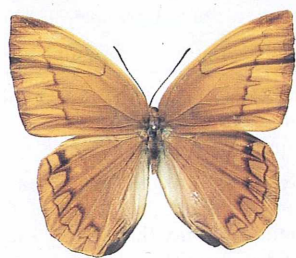
Fig. 6: Id., underside.

Fig. 7: *Zeuxidia sapphirus* spec. nov., holotype ♂. C. Vietnam, Thua Thien Hue Province, Bach Ma National Park, 19.VII.1996, BUI XUAN PHUONG leg., upperside.

Fig. 8: Id., underside.

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Colour plate VII



Colour plate VIII

MONASTYRSKII, A. L. & A. L. DEVYATKIN: New taxa and new records of butterflies from Vietnam, 2 (Lepidoptera, Rhopalocera). – *Atalanta* **34** (1/2): 75–109.

Fig. 1: *Discophora aestheta* spec. nov., holotype ♂. S. Vietnam, Dong Nai Prov., Cat Tien National Park, 8.XII.2000, A. L. MONASTYRSKII leg., upperside.

Fig. 2: Id., underside.

Fig. 3: *Discophora aestheta* spec. nov., paratype ♀. S. Vietnam, Lam Dong Prov., Cat Tien National Park (Dinh Vu), 3.–5.V.2000, Bui Huu MANH leg., upperside.

Fig. 4: *Zeuxidia sapphirus* spec. nov., paratype ♀. C. Vietnam, Thua Thien Hue Prov., Phong Dien Nature Reserve, 21.VI.1998, T. H. MINH leg., upperside.

Fig. 5: *Neptis armandia morrissi* subspec. nov., holotype ♂. C. Vietnam, Lam Dong Prov., Bi Doup – Nui Ba Nature Reserve, evergreen forest, 1500 m, 11.IV.2002, A. L. MONASTYRSKII leg., upperside.

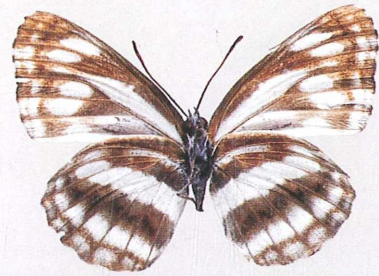
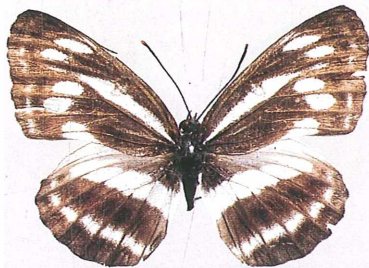
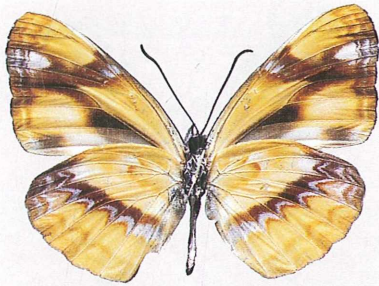
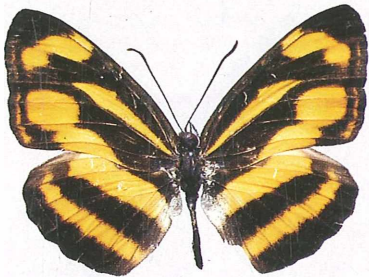
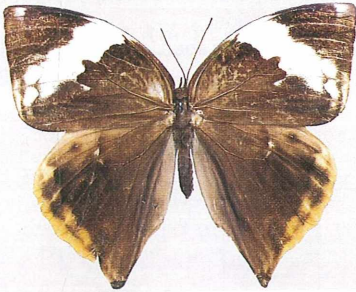
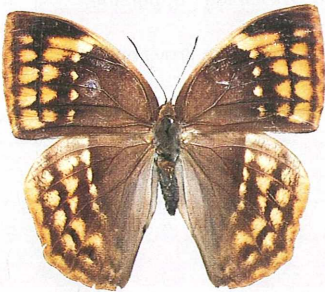
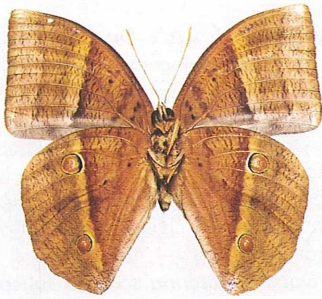
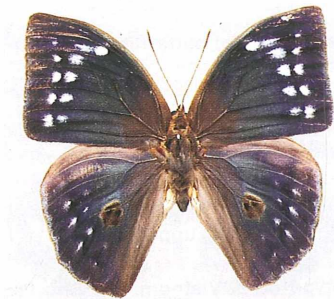
Fig. 6: Id., underside.

Fig. 7: *Neptis genulfa miennamica* subspec. nov., holotype ♂. C. Vietnam, Lam Dong Prov., Bi Doup – Nui Ba Nature Reserve, 1500 m, primary forest, 6.IV.2002, A. L. MONASTYRSKII leg., upperside.

Fig. 8: Id., underside.

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Colour plate VIII



Colour plate IX

MONASTYRSKII, A. L. & A. L. DEVYATKIN: New taxa and new records of butterflies from Vietnam, 2 (Lepidoptera, Rhopalocera). – *Atalanta* **34** (1/2): 75–109.

Fig. 1: *Neptis philyroides mienbaca* subspec. nov., holotype ♂. N. Vietnam, Bac Can Prov., loc. Lung Li, 860 m, 1.V.2001, Bui Xuan Phuong leg., upperside.

Fig. 2: Id., underside.

Fig. 3: *Euthalia confucius gibbsi* subspec. nov., holotype ♂. C. Vietnam, Ha Tinh Prov., Huong Son Forest Complex, cleared forest, 400 m, 12.V.2001, Frontier leg., upperside.

Fig. 4: Id., underside.

Fig. 5: *Dodona katerina sombra* subspec. nov., holotype ♂. C. Vietnam, Ha Tinh Prov., Vu Quang Nature Reserve, 1500 m, 5.IV.2000, A. L. MONASTYRSKII leg., upperside.

Fig. 6: Id., underside.

Fig. 7: *Euaspa minae* spec. nov., holotype ♂. C. Vietnam, Lam Dong Prov., Bi Doup – Nui Ba National Park, 1300 m, riverine forest, 14.IV.2002, A. L. MONASTYRSKII leg., upperside.

Fig. 8: Id., underside.

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Colour plate IX

